ARCADIS Design & Consultancy for natural and built assets

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Robert Weimer
Alaska Department of Conservation (ADEC)
555 Cordova Street
Anchorage, Alaska 95501

Subject:
2019 First Semi Annual Groundwater Monitoring Report

ENVIRONMENT

Dear Mr. Weimer,

On behalf of Chevron Environmental Management Company (Chevron), Arcadis US, Inc. (Arcadis) has prepared the attached *2019 Groundwater Monitoring Report* for the first semi-annual groundwater sampling events for the following facility:

Chevron Facility No.	ADEC File No.	Hazard ID:	Location
97324	2100.26.008	23885	4417 Lake Otis Parkway Anchorage, Alaska

If you have any questions, please do not hesitate to contact me.

Sincerely,

Arcadis U.S., Inc.

Nicole Monroe, P.E.
Project Manager

Copies:
Tim Bishop (*electronic copy*)
Nicole Jones-Vogel (*electronic copy*)

Date:
October 22, 2019

Contact:
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Our ref:
30015222

ARCADIS Design & Consultancy for natural and built assets

Chevron Environmental Management Company

2019 FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT

Former Chevron Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska
ADEC File No. 2100.26.008

October 2019

ARCADIS Design & Consultancy for natural and built assets

2019 FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT

Former Chevron-Branded Service Station 97324

4417 Lake Otis Parkway
Anchorage, Alaska

ADEC File No: 2100.26.008
HAZARD ID No: 23885

Prepared for:

Chevron Environmental Management Company

Prepared by:

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Date:

October 22, 2019

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Project Manager

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Principal Geologist

CONTENT

TABLES

FIGURES

APPENDICES

SEMI-ANNUAL STATUS REPORT
FIRST HALF 2019
October 22, 2019

Facility No:	Former Chevron-Branded Station No. 97324	Address:	4417 Lake Otis Parkway Anchorage, Alaska

Arcadis Contact Person / Phone No.:	Nicole Monroe/ (503) 785 9414
Arcadis Project No.:	30015222
Primary Agency/Regulatory ID No.:	Alaska Department of Conservation (ADEC) /ADEC File ID: 2100.26.008

WORK CONDUCTED THIS PERIOD [First Half 2019]:

1. Conducted semi-annual groundwater monitoring activities on April 9, 2019.
2. Prepared the *Semi-Annual Status Report, First Half 2019.*
3. Well Survey was conducted on June 7, 2019.

WORK PROPOSED NEXT PERIOD [Second Half 2019]:

1. Conduct semi-annual groundwater monitoring activities in the second half of 2019.
2. Prepare the *Semi-Annual Status Report, Second Half 2019*.

Current Phase of Project:	Monitoring	
Frequency of Monitoring / Sampling:	Semi-annual	
Are Light Non-Aqueous Phase Liquid (LNAPL) Present On-site:	No	
Cumulative LNAPL Recovered to Date:	0.00	(gallons)
Approximate Depth to Groundwater:	15.36 to 24.35	(feet below top of casing)
Approximate Groundwater Elevation:	143.88 to 143.93	(feet relative to corresponding datum)
Groundwater Flow Direction	South	

Groundwater Gradient	0.001	(feet per foot)
Current Remediation Techniques:	None	
Permits for Discharge:	None	
Summary of Unusual Activity:	None	
Agency Directive Requirements:	None	

1 INTRODUCTION

On behalf of Chevron Environmental Management Company (CEMC), Arcadis US, Inc. (Arcadis), has prepared this report to document the first semi-annual groundwater sampling events of 2019 for Chevron facility 97324, located at 4417 Lake Otis Parkway, Anchorage, Alaska (the site). The site location map and site plan are presented on Figure 1 and Figure 2, respectively.

This work was conducted under the direction of a "qualified person" [18 AAC 75. 990 (100), and 18 AAC 78.995 (118)]. Site background and history summaries are attached as Appendix A and field notes, data sheets, and general procedures are included as Appendix B.

2 GROUNDWATER MONITORING

2.1 Groundwater Gauging Methods

The 2019 first semi-annual groundwater gauging events was conducted on April 9, 2019. Monitoring wells MW-1R, MW-2R, MW-8RR, and MW-9 were gauged with an oil/water interface probe to determine depth-to-water and to ascertain if LNAPL was present.

In order to prevent the possibility of cross-contamination, wells were gauged in the order of lowest to highest historical petroleum hydrocarbon concentrations in groundwater. In addition, non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water.

2.2 Groundwater Elevation and Flow Direction

During the 2019 first semi-annual event, monitoring wells MW-1R. MW-2R, MW-8RR, and MW-9 were scheduled to be gauged for groundwater elevations and the presence of LNAPL. The groundwater monitoring event field notes are presented in Appendix B.

The inferred groundwater flow direction for the second semi-annual 2019 monitoring events is towards the south-southwest and is consistent with historical flow direction. Current groundwater depth-to-water and elevation data are included in Table 1. Historical depth-to-water and elevation data are included in Table 2. A groundwater contour map is presented as Figure 3.

2.3 Groundwater Sampling Methods

The first semi-annual groundwater monitoring event was conducted on April 9, 2019. Groundwater samples were collected from monitoring wells MW-1R, MW-2R, MW-8RR, and MW-9 using a low flow purge sampling method.

Sampling procedures were conducted in accordance with ADEC *Field Sampling Guidance* (ADEC, 2017). Monitoring well caps were removed to allow groundwater levels to stabilize and equilibrate before using an electronic interface probe (EIP) meter capable of 0.01-foot accuracy to measure the depth to groundwater and total well depth. A bladder pump with compressor & control unit with clean/disposable Teflon lined tubing and bladders was used to purge groundwater from the wells and collect samples to minimize the risk of volatile contaminant absorption by the sampling equipment. Water table drawdown was continuously monitored during purging with a water level meter and the flow rate of the pump was adjusted to limit drawdown to 0.1 meter. The intake of the pump was set as close as possible to the soil groundwater interface. Water quality parameters were monitored during purging with a multi-parameter water quality meter equipped with a flow through cell and Turbidity meter. Parameters were recorded every 3 to 5 minutes until a minimum of three (minimum of four if using temperature as an indicator) of the parameters listed below stabilized. The flow rate was reduced to 100-150 ml/minute and samples were collected from the discharge line into laboratory sample bottles. Water quality parameters were considered stable when three successive readings were within the following ADEC limits:

- ± 3% for temperature (minimum of ± 0.2 C°),
- ± 0.1 for pH,
- ± 3% for conductivity,
- ± 10 mv for redox potential,
- ± 10% for dissolved oxygen, and
- ± 10% for turbidity.

Sample bottles were labeled, stored in a cooler packed with ice, and submitted to Eurofins Lancaster Laboratories Environmental (Eurofins) in Lancaster, Pennsylvania, under proper chain-of-custody procedures.

Groundwater samples collected from monitoring wells MW-1R, MW-2R, MW-8RR, and MW-9 were submitted to the analytical laboratory for the following analyses:

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX), Methyl tert- butyl ether (MTBE) by United States Environmental Protection Agency (USEPA) method SW-846 8260C
- Total Petroleum Hydrocarbons as Gasoline Range Organics (TPH-g) by Alaska method AK101
- Total Petroleum Hydrocarbons as Gasoline Range Organics (TPH-d) by Alaska method AK102
- 1,2-Dichloroethane (EDC), Trichloroethylene (TCE), Tetrachloroethylene (PCE), Cis 1,2-Dichloroethane (Cis-1,2-DCE), Methylene Chloride by USEPA SW-846 8260C

A groundwater duplicate sample was collected from monitoring wells MW-1R. The duplicate samples were analyzed for BTEX, MTBE, EDC, TCE, PCE, Cis-1,2-DCE, Methylene Chloride, TPH-g and TPH-d. The duplicate samples were submitted blind with the sample set to Eurofins.

2.4 Groundwater Analytical Results

Routine analytical results for the above-mentioned constituents obtained from the first semi-annual 2019 groundwater monitoring event are summarized in Table 1 and are shown on Figure 4. Additional VOCs analytical results are summarized in Table 2.

3 LABORATORY DATA QUALITY ASSURANCE SUMMARY

As required by ADEC (Technical Memorandum 06-002, dated March, 2009), Arcadis completed a laboratory data review checklist for each of the laboratory reports generated for the 2019 semi-annual events. The laboratory reports are included as Appendix C and data review checklists are included as Appendix D. The following quality assurance (QA) summary describes six parameters, related to the quality and usability of the data presented in this report.

3.1 Precision

The relative percent difference (RPD) for matrix spike/matrix spike duplicate (MS/MSD), and field duplicates (FD) were within the control limits. The RPD between laboratory control sample (LCS) / laboratory control sample duplicate (LCSD) for compounds acenaphthylene, fluorene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)perylene were exceeded the control limits. The associated results were qualified as estimated.

The precision of the data, as measured by laboratory quality control (QC) indicators, suggest that the Data Quality Objectives (DQOs) were met with the exception of the estimated data.

3.2 Accuracy

The MS and MSD recovery exceedances were observed for compound tetrachloroethene. The associated results were qualified as estimated.

The low LCSD recovery was observed for compounds acenaphthylene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)perylene in sample MW-2R-W-190409. The associated results were qualified as estimated.

The accuracy of the data, as measured by laboratory quality control (QC) indicators, suggest that the DQOs were met with the exception of the estimated data.

3.3 Representativeness

The data appear to be representative of site conditions and are generally consistent with historical groundwater monitoring results and expected impacts to groundwater.

3.4 Comparability

The laboratory results are presented in the same units as previous reports to allow comparison.

3.5 Completeness

The results appear to be valid and usable, and thus, the laboratory results have 100% completeness.

3.6 Sensitivity

The sensitivity of the analyses was adequate for the samples as the detection limits were less than the ADEC GCLs for compounds.

4 CONCLUSIONS AND RECOMMENDATIONS

The groundwater data collected during the first semi-annual 2019 events indicate groundwater flow directions (south) are generally consistent with historical data. During the first semi-annual 2019 groundwater monitoring events, groundwater samples were collected for analysis from monitoring wells MW-1R, MW-2R, MW-8RR, and MW-9. Analytical results from the monitoring wells are generally consistent with historical data with some slight seasonal fluctuations.

Groundwater monitoring will continue in accordance with the current semi-annual schedule. The second semi-annual sampling event of 2019 was conducted in the fall of 2019 and will be reported separately.

5 REFERENCES

ADEC. *Field Sampling Guidance*. Division of Spill Prevention and Response Contaminated Sites Program. August, 2017.

ADEC Technical Memorandum, March, 2017. *Data Quality Objectives, Checklists, Quality Assurance Requirements for Laboratory Data, and Sample Handling*. ADEC, Division of Spill Prevention and Response Contaminated Sites Program.

TABLES

Table 1. Current Groundwater Gauging and Analytical Results
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft)	Datum	DTW* (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
ADEC Groundwater Cleanup Levels								**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**
MW-1R [BD]	4/9/2019	--	167.56	NAVD88	23.63	0.00	143.93	<0.28 B[1] [<0.25 B][1]	<0.014 [<0.014]	**0.001 [0.001]**	<0.0002 [<0.0002]	<0.0004 [<0.0004]	<0.001 [<0.001]	<0.0002 [<0.0002]
MW-2R	4/9/2019	--	168.25	NAVD88	24.35	0.00	143.90	**1.2**	**0.025 J**	**0.004**	<0.0002	**0.0005 J**	<0.001	<0.0002
MW-8RR	4/9/2019	--	166.43	NAVD88	22.51	0.00	143.92	<0.25 B[1]	<0.014	<0.0002	<0.0002	<0.0004	<0.001	<0.0002
MW-9	4/9/2019	--	159.24	NAVD88	15.36	0.00	143.88	<0.25 B[1]	**0.087 J**	<0.0002	<0.0002	<0.0004	<0.001	<0.0002
QA (TB)	4/3/2019	--	--	NAVD88	--	--	--	**--**	<0.014	<0.0002	<0.0002	<0.0004	<0.001	<0.0002

Notes:

ID = Identification
MW = Groundwater monitoring well
TOC = Top of casing
DTW = Depth to groundwater
ft bTOC = Feet below top of casing
ft = Feet
mg/L = Milligrams per liter
GW Elev = Groundwater elevation
Bold = Value exceeds MDL
Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level
<0.0002 = Not detected at or above the method detection limit (MDL)
NAVD 88 = North American Vertical Datum of 1988
LNAPL = Light Non-Aqueous Phase Liquid
[BD] = Blind Duplicate Sample Result
QA (TB) = Quality Assurance (Trip Blank)
-- = Not Measured/Not analysed
ADEC = Alaska Department of Environmental Conservation
* = Depth to water taken from Recent Well Survey 6/7/2019

TPH-g = Total petroleum hydrocarbons, gasoline range by LUFT GC/MS according to United States Environmental Protection Agency (USEPA) Method AK 101
TPH-d = Total petroleum hydrocarbons, diesel range by LUFT GC/MS according to USEPA Method AK 102-SV 4/8/02
Samples analyzed by USEPA SW-846 8260C
Benzene, toluene, ethylbenzene and total xylenes (collectively BTEX)
MTBE = Methyl tert-butyl ether
UB { represented as < [MDL] B } = Compound considered non-detect at the listed value due to associated blank contamination
J = Esimated value between MDL and Limit of Quantitation (LOQ)
[1] = Non detect reported to LOQ

Table 2. Current Groundwater Analytical Results - Additional VOCs
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft)	Datum	DTW* (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft)	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)
					ADEC Groundwater Cleanup Levels			**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**
MW-1R [BD]	4/9/2019	--	167.56	NAVD88	23.63	0.00	143.93	**0.001 [0.001]**	<0.0002 [<0.0002]	<0.0002 [0.0004 J]	<0.0002 [<0.0002]	<0.0003 [<0.0003]
MW-2R	4/9/2019	--	168.25	NAVD88	24.35	0.00	143.90	**0.005**	<0.0002	**0.0004 J**	<0.0002	<0.0003
MW-8RR	4/9/2019	--	166.43	NAVD88	22.51	0.00	143.92	**0.001**	<0.0002	**0.003 J**	<0.0002	<0.0003
MW-9	4/9/2019	--	159.24	NAVD88	15.36	0.00	143.88	<0.0003	**0.023**	**0.085**	**0.067**	<0.0003
QA (TB)	4/3/2019	--	--	NAVD88	--	--	--	<0.0003	<0.0002	<0.0002	<0.0002	<0.0003

Notes:

ID = Identification
MW = Groundwater monitoring well
mg/L = Milligrams per liter
Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level
Bold = Value exceeds MDL
<0.0002 = Not detected at or above the method detection limit (MDL)
[BD] = Blind Duplicate Sample Result
QA (TB) = Quality Assurance (Trip Blank)
ADEC = Alaska Department of Environmental Conservation
Samples analyzed by USEPA SW-846 8260C
EDC = 1,2-Dichloroethane
TCE = Trichloroethylene
PCE = Tetrachloroethylene
cis-1,2-DCE = cis 1,2-Dichloroethane

Table 3. Historical Groundwater Gauging and Analytical Results
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-1	2/1/1992	--	--	--	0.00	--	--	--	**0.25**	**0.2**	**5.1**	**0.14**	--	Sample date accurate to month and year only
MW-1	5/1/1992	--	99.13	23.38	0.00	75.75	--	--	**0.19**	**0.18**	**0.4**	**0.13**	--	Sample date accurate to month and year only
MW-1	9/1/1992	--	99.13	23.56	0.00	75.57	--	--	**0.23**	**0.2**	**3.3**	**0.1**	--	Sample date accurate to month and year only
MW-1	11/1/1992	--	99.13	23.55	0.00	75.58	--	--	**0.23**	**0.27**	**0.3**	**0.11**	--	Sample date accurate to month and year only
MW-1	5/1/1993	--	99.13	23.87	0.00	75.26	--	--	**2.0**	**33.0**	**4.4**	**15.0**	--	Sample date accurate to month and year only
MW-1	8/1/1993	--	99.13	23.84	0.00	75.29	--	--	**17.0**	**40.0**	**4.5**	**16.0**	--	Sample date accurate to month and year only
MW-1	11/1/1993	--	99.13	23.83	0.00	75.30	--	--	**2.4**	**6.6**	**8.4**	**31.0**	--	Sample date accurate to month and year only
MW-1	3/1/1994	--	99.13	23.68	0.00	75.45	--	--	**10.0**	**35.0**	**4.2**	**14.0**	--	Sample date accurate to month and year only
MW-1	6/1/1994	--	99.13	23.6	0.00	75.53	--	--	**11.0**	**47.0**	**4.8**	**17.0**	--	Sample date accurate to month and year only
MW-1	8/1/1994	--	99.13	24.09	0.00	75.04	--	--	**11.0**	**34.0**	**4.7**	**18.0**	--	Sample date accurate to month and year only
MW-1	12/22/1994	--	99.13	23.83	0.00	75.30	--	--	**13.0**	**31.0**	**3.6**	**11.0**	--	
MW-1	3/31/1995	--	99.13	23.72	0.00	75.41	--	--	**11.0**	**22.0**	**4.2**	**12.0**	--	
MW-1	6/20/1995	--	99.13	23.39	0.00	75.74	--	--	**7.9**	**20.0**	**3.1**	**9.4**	--	
MW-1	8/23/1995	--	99.13	23.67	0.00	75.46	--	--	**8.4**	**22.0**	**3.2**	**11.0**	--	
MW-1	11/16/1995	--	99.13	23.68	0.00	75.45	--	--	**7.2**	**17.0**	**3.0**	**9.3**	--	
MW-1	1/30/1996	--	99.13	23.92	0.00	75.21	--	--	**10.0 / 11.0**	**26.0 / 26.0**	**3.9 / 3.8**	**12.0 / 11.0**	--	
MW-1	6/2/1996	--	99.13	23.62	0.00	75.51	--	--	**8.91**	**24.4**	**3.59**	**12.8**	--	
MW-1	8/26/1996	--	99.13	24.06	0.00	75.07	--	--	**8.75**	**29.3**	**3.49**	**14.0**	--	
MW-1	10/16/1996	--	99.13	24.59	0.00	74.54	--	--	**9.34**	**30.2**	**4.02**	**15.1**	--	
MW-1	4/28/1997	--	99.13	23.96	0.00	75.17	--	--	**8.2**	**21.9**	**3.98**	**16.9**	--	
MW-1	9/10/1997	--	99.13	23.31	0.00	75.82	--	--	**4.43 / 4.38**	**18.7 / 17.6**	**2.84 / 2.82**	**11.2 / 10.8**	--	
MW-1	4/19/1998	--	99.13	22.9	0.00	76.23	--	--	**3.86**	**17.3**	**3.44**	**12.9**	--	
MW-1	9/23/1998	--	99.13	23.19	0.00	75.94	--	--	**2.92 / 3.06**	**9.96 / 10.5**	**2.29 / 2.46**	**7.0 / 7.49**	--	
MW-1	4/28/1999	--	99.13	23.68	0.00	75.45	--	--	**1.22 / 1.24**	**4.86 / 4.86**	**1.96 / 1.96**	**5.96 / 5.89**	<0.5 / <0.5	
MW-1	5/5/2001	--	99.13	24.38	0.00	74.75	--	--	**0.576**	**4.92**	**1.83**	**7.1**	<0.5 / 0.005	
MW-1	8/2/2001	--	99.13	23.81	0.00	75.32	**0.123**	**71.3**	**3.41**	**8.37**	**3.32**	**8.79**	--	Sample date defaulted to first date listed in historical data table
MW-1	10/2/2001	--	99.13	24.12	0.00	75.01	--	--	**0.19**	**17.6 / 18.5**	**3.92**	**17.3 / 17.5**	**51.9 /** <0.005	
MW-1	5/1/2002	--	161.02	24.14	0.00	136.88	--	--	**0.355**	**5.66**	**4.24**	**20.4**	**42.8 /** <0.005	
MW-1	9/20/2002	--	161.02	24	0.00	137.02	--	--	**0.231**	**2.28**	**1.4**	**5.09**	<0.05 / <0.002	
MW-1	5/20/2003	--	161.02	24.47	0.00	136.55	--	--	**0.91**	**4.3**	**2.6**	**8.4**	**0.003**	Car parked over well/ Sample date defaulted to first date listed in historical data table
MW-1	10/2/2003	--	161.02	24.25	0.00	136.77	--	--	**0.56**	**4.7**	**2.3**	**8.2**	<0.005	
MW-1	5/1/2004	--		DESTROYED - MAY 2004										
MW-1R	9/24/2006	--	160.69	23.2	0.00	137.49	**8.3**	**49.0**	**0.14**	**0.46**	**2.1**	**13.1**	--	
MW-1R	5/14/2007	--	160.69	23.68	0.00	137.01	**4.0**	**42.0**	**0.5**	**1.4**	**2.3**	**8.6**	<0.001	
MW-1R	9/21/2007	--	160.69	23.61	0.00	137.08	**4.9**	**30.0**	**0.2**	**0.94**	**1.5**	**6.4**	--	
MW-1R	5/1/2008	--	160.69	23.77	0.00	136.92	**3.92**	**53.2**	**0.43**	**3.88**	**3.46**	**14.4**	--	
MW-1R	7/15/2008	--	160.69	23.59	0.00	137.10	**5.50**	**65.0**	**0.32**	**5.20**	**2.40**	**11.90**	--	
MW-1R	5/14/2009	--	160.69	23.69	0.00	137.00	**3.8 / 3.9**	**50 / 47**	**0.14 / 0.13**	**1.7 / 1.9**	**2.5 / 2.6**	**12.5 / 11.3**	--	
MW-1R	8/26/2009	--	160.69	23.93	0.00	136.76	**4.9 J / 4.4 J**	**53 / 51**	**0.23 / 0.23**	**3.9 / 3.8**	**2.7 / 2.7**	**11.7/11.7**	--	
MW-1R	6/15/2010	--	160.69	23.66	0.00	137.03	**4.6 J / 4.5 J**	**43 / 38**	**0.13 J / 0.083 J**	**1.9 J / 1.2 J**	**2.2 / 2.4**	**9.7 / 11.8**	--	
MW-1R	9/5/2010	--	160.69	23.66	0.00	137.03	**5.6 / 5.4**	**48 / 47**	**0.070 / 0.068**	**1.2 / 1.1**	**2.7 / 2.1**	**12.3 / 10.3**	--	
MW-1R	5/24/2011	--	160.69	24.08	0.00	136.61	**2.2**	**6.1**	**0.066**	**0.005**	**0.49**	**0.71**	--	
MW-1R	11/10/2011	--	160.69	23.92	0.00	136.77	**2.4 / 2.6**	**0.83 J / 0.80 J**	<0.0005 / <0.0005	<0.0005 / <0.0005	**0.004 J / 0.0005 J**	**0.012 J / 0.001 J**	--	Car parked over well
MW-1R	6/20/2012	--	160.69	23.35	0.00	137.34	**2.3 / 1.7**	**0.070 J / 0.055 J**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	0.0006 J / <0.0005	--	
MW-1R	11/5/2012	--	160.69	22.7	0.00	137.99	**0.31 J / 0.47 J**	**0.012 J / 0.019 J**	<0.0005 / <0.0005	<0.0005 / 0.0005 J	<0.0005 / <0.0005	**0.0018 J / 0.0016 J**	--	
MW-1R	4/30/2013	--	160.69	23.76	0.00	136.93	**1.2 / 1.1**	**5.1 / 3.7**	**0.0131 / 0.0115**	**0.0022 / 0.0021**	**0.686 / 0.668**	**0.361 / 0.336**	--	
MW-1R	4/30/2013	--	160.69	23.76	0.00	136.93	**0.93 / 1.4**	**5.6 / 3.4**	**0.0112 / 0.0116**	**0.0028 / 0.0018**	**0.779 J / 0.36 J**	**0.459 / 0.281**	--	Collected via hydrasleeve
MW-1R	11/7/2013	--	160.69	23.02	0.00	137.67	**-**	**-**	**-**	**-**	**-**	**-**	--	
MW-1R	11/8/2013	--	-	-	0.00	-	**2.6 / 2.6**	**7.9 / 8.7**	**0.021 / 0.018**	**0.0043 J / 0.0065**	**0.57 / 0.76**	**0.85 J / 1.5 J**	--	
MW-1R	4/28/2014	--	160.69	23.47	0.00	137.22	**1.9 / 1.7**	**8.7 / 9.8**	**0.017 / 0.017**	**0.0043 / 0.0039**	**0.86 / 0.85**	**1.5 / 1.4**	--	
MW-1R	4/28/2014	--	160.69	23.47	0.00	137.22	**1.7 / 1.9**	**5.2 J / 8.8 J**	**0.014 / 0.017**	**0.0042 J / 0.0033**	**0.72 / 0.98**	**1.3 / 2.0**	--	Collected via hydrasleeve
MW-1R	11/7/2014	--	160.69	23.88	0.00	136.81	**1.8/2.0**	**5.8/5.5**	**0.0076/0.0070**	**0.0040 J/0.0043 J**	**0.38/0.36**	**0.65/0.60**	--	
MW-1R	4/29/2015	--	160.69	24.26	0.00	136.43	**0.31**	**0.025 J**	<0.0005	<0.0005	**0.002**	**0.001**	--	
MW-1R	11/6/2015	--	160.69	23.42	0.00	137.27	**0.42**	<0.010	<0.001	<0.001	<0.001	<0.001	--	

Table 3. Historical Groundwater Gauging and Analytical Results
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-1R	4/21/2016	--	160.69	24.11	0.00	136.58	**0.66**	**0.039 J**	**0.003**	<0.0005	<0.0005	<0.0005	--	
MW-1R	11/1/2016	--	160.69	23.72	0.00	136.97	**0.27 J**	**0.015 J**	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-1R	5/1/2017	--	160.69	23.59	0.00	137.10	**0.085 J**	**0.013 J**	**0.0006 J**	<0.0005	<0.0005	<0.0005	--	
MW-1R	10/17/2017	--	160.69	23.49	0.00	137.20	**0.069 J**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-1R	4/27/2018	--	160.69	23.84	0.00	136.85	**0.24 J**	**0.017 J**	**0.0007 J**	<0.0005	<0.0005	<0.0005	<0.0005	
MW-1R	10/18/2018	--	160.69	23.80	0.00	136.89	**0.069 J**	<0.014	<0.0002	<0.0002	<0.0002	<0.0005	-	
MW-1R	4/9/2019	--	167.56	23.63[2]	0.00	143.93	<0.28 B [<0.25 B]	<0.014 [<0.014]	**0.001 [0.001]**	<0.0002 [<0.0002]	<0.0004 [<0.0004]	<0.001 [<0.001]	<0.0002 [<0.0002]	TPH-d Non detect reported to LOQ Car parked over well
MW-2R	9/24/2006	--	161.29	23.76	0.00	137.53	**4.2**	**47.0**	**0.36**	**4.3**	**2.1**	**10.7**	--	
MW-2R	5/14/2007	--	161.29	24.24	0.00	137.05	**2.8 / 4.90**	**28.0 / 28.0**	**0.19 / 0.18**	**0.39 / 0.35**	**1.5 / 1.5**	**6.8 / 6.5**	<0.001 / <0.001	
MW-2R	9/21/2007	--	161.29	24.28	0.00	137.01	**4.0**	**24.0**	**0.08**	**0.14**	**0.88**	**5.7**	--	
MW-2R	5/1/2008	--	161.29	24.38	0.00	136.91	**5.25 / 7.51**	**25.2 / 23.7**	**0.121 / 0.109**	<0.05 / 0.051	**1.99 / 1.92**	**6.2 / 6.6**	--	
MW-2R	7/15/2008	--	161.29	24.23	0.00	137.06	**6.40 / 6.40**	**18.0 / 10.0**	**0.095 / 0.095**	**0.069 / 0.079**	**1.3 / 1.3**	**5.70 / 5.20**	--	
MW-2R	5/14/2009	--	161.29	24.34	0.00	136.95	**5.0**	**26**	**0.059**	**0.031**	**1.3**	**4.7**	--	
MW-2R	8/26/2009	--	161.29	24.61	0.00	136.68	**4.1 J**	**21**	**0.077**	**0.049**	**1.1**	**4.0**	--	
MW-2R	6/15/2010	--	161.29	24.29	0.00	137.00	**5.4**	**8.8**	**0.026**	**0.011**	**0.32**	**1.46**	--	
MW-2R	9/5/2010	--	161.29	24.32	0.00	136.97	**6.0**	**7.9**	**0.017**	**0.008**	**0.67**	**3.06**	--	
MW-2R	5/24/2011	--	161.29	24.78	0.00	136.51	**4.8 / 4.8**	**13 / 13**	**0.031 / 0.029**	**0.015 / 0.014**	**0.76 / 0.76**	**2.6 / 2.6**	--	
MW-2R	11/10/2011	--	161.29	24.63	0.00	136.66	**0.85**	**0.071 J**	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-2R	6/20/2012	--	161.29	24.06		137.23	**1.2**	**0.030 J**	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-2R	11/5/2012	--	161.29	23.38		137.91	**-**	**-**	**-**	**-**	**-**	**-**	--	
MW-2R	11/8/2012	--	-	-	0.00	-	**0.37**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-2R	4/30/2013	--	161.29	24.48	0.00	136.81	**1.2**	**2.3**	**0.0105**	**0.0016**	**0.0406**	**0.469**	--	
MW-2R	11/7/2013	--	161.29	23.67	0.00	137.62	**1.3**	**1.5**	**0.0057**	**0.00096 J**	**0.0015**	**0.283**	--	Collected via hydrasleeve
MW-2R	11/8/2013	--	-	-	0.00	-	**-**	**-**	**-**	**-**	**-**	**-**	--	
MW-2R	4/28/2014	--	161.29	24.11	0.00	137.18	**1.7**	**0.49**	**0.00084 J**	<0.00023	<0.00024	**0.0047**	--	
MW-2R	4/28/2014	--	161.29	24.11	0.00	137.18	**1.7**	**4.5**	**0.012**	**0.0021**	**0.37**	**0.64**	--	
MW-2R	11/7/2014	--	161.29	24.55	0.00	136.74	**0.88**	**0.39**	**0.0018**	**0.00020 J**	**0.030**	**0.037**	--	Collected via hydrasleeve
MW-2R	4/29/2015	--	161.29	24.85	0.00	136.44	**1.7**	**5.1**	**0.0068**	<0.0017 J	**0.25**	**0.37**	--	
MW-2R	11/6/2015	--	161.29	24.12	0.00	137.17	**0.34 / 0.40**	**0.011 J / 0.013 J**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	--	
MW-2R	4/21/2016	--	161.29	24.79	0.00	136.50	**0.99 J / 0.63 J**	<0.010 / <0.010	<0.001 / <0.003	<0.001 / <0.003	<0.001 / <0.003	<0.001 / <0.003	--	
MW-2R	11/1/2016	--	161.29	24.45	0.00	136.84	**2.7 / 2.6**	**2.2 / 2.2**	**0.01 / 0.009 J**	0.0009 J / <0.005	**0.15 / 0.12**	**0.231 / 0.18**	--	
MW-2R	5/1/2017	--	161.29	24.3	0.00	136.99	**2.5 J / 2.3 J**	**2.8 J / 2.9 J**	**0.010 / 0.010**	**0.001 J / 0.001 J**	**0.14 / 0.14**	**0.272 / 0.272**	--	
MW-2R	10/17/2017	--	161.29	24.18	0.00	137.11	**0.87 / 0.84**	**0.82 / 0.82**	**0.006 / 0.006**	<0.0005 / <0.0005	**0.078 / 0.084**	**0.046 / 0.054**	--	
MW-2R	4/27/2018	--	161.29	24.55	0.00	136.74	**1.5 J/ 1.5 J**	**2.0 / 2.1**	**0.009 / 0.01**	<0.0005 /< 0.0005	**0.16 / 0.16**	**0.153 / 0.153**	--	
MW-2R	10/18/2018	--	161.29	24.53	0.00	136.76	**1.4 / 1.3**	**1.4 / 1.4**	**0.007 / 0.006**	**0.0006 J / 0.0005 J**	**0.14 / 0.13**	**0.12 / 0.11**	<0.0005 / <0.0005	
MW-2R	4/9/2019	--	168.25	24.35[2]	0.00	143.90	**0.38 / 0.35**	<0.014 / <0.014	<0.0002 / <0.0002	<0.0002 / <0.0002	<0.0002 / <0.0002	<0.0005 / <0.0005	-	
					0.00		**1.2**	**0.025 J**	**0.004**	<0.0002	**0.0005 J**	<0.001	<0.0002	
MW-3	2/1/1992	--	--	--	0.00	--	**--**	**--**	**0.006**	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	5/1/1992	--	98.64	22.87	0.00	75.77	**--**	**--**	**0.006**	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	9/1/1992	--	98.64	23.12	0.00	75.52	**--**	**--**	**0.21**	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	11/1/1992	--	98.64	23.1	0.00	75.54	**--**	**--**	**0.012**	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	5/1/1993	--	98.64	23.45	0.00	75.19	**--**	**--**	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	8/1/1993	--	98.64	23.35	0.00	75.29	**--**	**--**	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	11/1/1993	--	98.64	23.21	0.00	75.43	**--**	**--**	ND	**0.042**	ND	ND	--	Sample date accurate to month and year only
MW-3	3/1/1994	--	98.64	23.16	0.00	75.48	**--**	**--**	ND	ND	ND	**0.005**	--	Sample date accurate to month and year only
MW-3	6/1/1994	--	98.64	23.49	0.00	75.15	**--**	**--**	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	8/1/1994	--	98.64	23.65	0.00	74.99	**--**	**--**	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-3	12/22/1994	--	98.64	23.42	0.00	75.22	**--**	**--**	ND	ND	ND	ND	--	
MW-3	4/10/1995	--	98.64	--	0.00	--	**--**	**--**	ND	ND	ND	ND	--	
MW-3	6/20/1995	--	98.64	22.95	0.00	75.69	**--**	**--**	ND	ND	ND	ND	--	
MW-3	6/21/1995	--	98.64	--	0.00	--	**--**	**--**	**--**	**--**	**--**	**--**	--	
MW-3	8/23/1995	--	98.64	23.19	0.00	75.45	**--**	**--**	ND	ND	ND	ND	--	
MW-3	11/16/1995	--	98.64	23.23	0.00	75.41	**--**	**--**	ND	ND	ND	ND	--	
MW-3	1/30/1996	--	98.64	23.48	0.00	75.16	**--**	**--**	ND	ND	ND	ND	--	

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First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-3	6/2/1996	--	98.64	23.22	0.00	75.42	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-3	8/26/1996	--	98.64	23.56	0.00	75.08	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-3	10/16/1996	--	98.64	24.05	0.00	74.59	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-3	4/28/1997	--	98.64	23.73	0.00	74.91	--	--	<0.0005	**0.00111**	<0.0005	**0.00169**	--	
MW-3	9/10/1997	--	98.64	22.96	0.00	75.68	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-3	4/19/1998	--	98.64	23.55	0.00	75.09	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	--	
MW-3	9/23/1998	--	98.64	22.9	0.00	75.74	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-3	4/28/1999	--	98.64	23.24	0.00	75.40	--	--	**0.00089**	<0.0005	<0.0005	<0.0005	<0.01	
MW-3	10/13/1999	--	98.64	23.22	0.00	75.42	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
MW-3	5/19/2000	--	98.64	23.6	0.00	75.04	--	--	<0.001	<0.001	<0.001	<0.002	<0.002	
MW-3	9/27/2000	--	98.64	23.52	0.00	75.12	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-3	5/5/2001	--	98.64	23.88	0.00	74.76	--	--	**0.000656**	<0.0005	<0.0005	<0.001	<0.005	
MW-3	8/2/2001	--	98.64	23.36	0.00	75.28	**0.00136**	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-3	10/2/2001	--	98.64	23.72	0.00	74.92	--	--	**0.0011 / 0.000854**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	<0.001 / <0.001	
MW-3	5/1/2002	--	160.51	23.72	0.00	136.79	--	--	**0.099 / 0.286**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	<0.001 / <0.001	
MW-3	9/20/2003	--	160.51	23.55	0.00	136.96	--	--	**0.000709**	<0.0005	<0.0005	<0.001	<0.001	
MW-3	5/20/2003	--	160.51	24.02	0.00	136.49	--	--	**0.0006 / 0.0006**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.002 / <0.002	Sample date defaulted to first date listed in historical data table
MW-3	10/2/2003	--	160.51	23.84	0.00	136.67	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
MW-3	5/1/2004	--		DESTROYE	0.00									
					0.00									
MW-4	2/1/1992	--	--	--	0.00	--	--	--	**0.032**	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	5/1/1992	--	98.45	21.72	0.00	76.73	--	--	--	--	--	--	--	Sample date accurate to month and year only
MW-4	9/1/1992	--	98.45	22.89	0.00	75.56	--	--	**0.005**	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	11/1/1992	--	98.45	22.85	0.00	75.60	--	--	--	--	--	--	--	Sample date accurate to month and year only
MW-4	5/1/1993	--	98.45	23.18	0.00	75.27	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	8/1/1993	--	98.45	23.17	0.00	75.28	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	11/1/1993	--	98.45	23.02	0.00	75.43	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	3/1/1994	--	98.45	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	6/1/1994	--	98.45	23.24	0.00	75.21	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	8/1/1994	--	98.45	23.43	0.00	75.02	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-4	12/22/1994	--	98.45	--	0.00	--	--	--	--	--	--	--	--	
MW-4	3/31/1995	--	98.45	--	0.00	--	--	--	--	--	--	--	--	
MW-4	6/20/1995	--	98.45	22.7	0.00	75.75	--	--	ND	ND	ND	ND	--	
MW-4	8/23/1995	--	98.45	22.99	0.00	75.46	--	--	ND	ND	ND	ND	--	
MW-4	11/16/1995	--	98.45	23.02	0.00	75.43	--	--	ND	ND	ND	ND	--	
MW-4	1/30/1996	--	98.45	23.25	0.00	75.20	--	--	ND	ND	ND	ND	--	
MW-4	6/2/1996	--	98.45	22.97	0.00	75.48	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-4	8/26/1996	--	98.45	23.37	0.00	75.08	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	--	
MW-4	4/28/1997	--	98.45	23.52	0.00	74.93	--	--	<0.0005	**0.00166**	<0.0005	**0.00159**	--	
MW-4	9/10/1997	--	98.45	22.74	0.00	75.71	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-4	4/19/1998	--	98.45	23.3	0.00	75.15	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-4	9/23/1998	--	98.45	22.68		75.77	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-4	5/2/1999	--	98.45	23.1	0.00	75.35	--	--	<0.0005	<0.0005	<0.0005	<0.0005	**0.626 / <0.005**	
MW-4	10/13/1999	--	98.45	23.02	0.00	75.43	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
MW-4	5/19/2000	--	98.45	23.39	0.00	75.06	--	--	<0.001	<0.001	<0.001	<0.002	<0.002	
MW-4	9/27/2000	--	98.45	23.32	0.00	75.13	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-4	5/5/2001	--	98.45	23.71	0.00	74.74	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-4	8/2/2001	--	98.45	23.14	0.00	75.31	**0.00106**	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-4	10/2/2001	--	98.45	23.54	0.00	74.91	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
MW-4	5/1/2002	--	160.3	--	0.00	--	--	--	--	--	--	--	--	
MW-4	9/20/2002	--	160.3	23.39	0.00	136.91	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
MW-4	5/20/2003	--	160.3	23.8	0.00	136.50	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	Sample date defaulted to first date listed in historical data table
MW-4	10/2/2003	--	160.3	23.59	0.00	136.71	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
MW-4	5/1/2004	--		DESTROYE	0.00									
					0.00									
MW-5	2/1/1992	--	--	--	0.00	--	--	--	**7.2**	**4.8**	**2.0**	**2.9**	--	Sample date accurate to month and year only

Table 3. Historical Groundwater Gauging and Analytical Results
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
				ADEC Groundwater Cleanup Levels			**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-5	5/1/1992	--	99.13	22.5	0.00	76.63	--	--	**2.5**	**0.14**	**0.05**	**1.8**	--	Sample date accurate to month and year only
MW-5	9/1/1992	--	99.13	23.57	0.00	75.56	--	--	**5.9**	**6.5**	**2.4**	**5.3**	--	Sample date accurate to month and year only
MW-5	11/1/1992	--	99.13	22.53	0.00	76.60	--	--	**1.3**	**0.59**	**0.48**	**1.7**	--	Sample date accurate to month and year only
MW-5	5/1/1993	--	99.13	23.86	0.00	75.27	--	--	**0.066**	ND	**0.032**	**0.005**	--	Sample date accurate to month and year only
MW-5	8/1/1993	--	99.13	23.85	0.00	75.28	--	--	**0.058**	ND	**0.005**	ND	--	Sample date accurate to month and year only
MW-5	11/1/1993	--	99.13	23.7	0.00	75.43	--	--	**0.006**	ND	ND	ND	--	Sample date accurate to month and year only
MW-5	3/1/1994	--	99.13	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-5	6/1/1994	--	99.13	23.89	0.00	75.24	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-5	8/1/1994	--	99.13	24.14	0.00	74.99	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-5	12/22/1994	--	99.13	--	0.00	--	--	--	--	--	--	--	--	
MW-5	3/31/1995	--	99.13	--	0.00	--	--	--	--	--	--	--	--	
MW-5	6/20/1995	--	99.13	23.4	0.00	75.73	--	--	ND	ND	ND	ND	--	
MW-5	8/23/1995	--	99.13	23.7	0.00	75.43	--	--	ND	ND	ND	ND	--	
MW-5	11/16/1995	--	99.13	23.71	0.00	75.42	--	--	ND	ND	ND	ND	--	
MW-5	1/30/1996	--	99.13	23.95	0.00	75.18	--	--	ND	ND	ND	ND	--	
MW-5	6/2/1996	--	99.13	23.63	0.00	75.50	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-5	8/26/1996	--	99.13	24.19	0.00	74.94	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-5	10/16/1996	--	99.13	24.66	0.00	74.47	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-5	4/28/1997	--	99.13	24.24	0.00	74.89	--	--	**0.000617**	**0.000756**	<0.0005	<0.001	--	
MW-5	9/10/1997	--	99.13	23.43	0.00	75.70	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-5	4/19/1998	--	99.13	24	0.00	75.13	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-5	9/23/1998	--	99.13	23.2	0.00	75.93	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-5	4/28/1999	--	99.13	23.67	0.00	75.46	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	
MW-5	10/13/1999	--	99.13	23.72	0.00	75.41	--	--	<0.0005	**0.00139**	<0.0005	<0.0005	<0.005	
MW-5	5/19/2000	--	99.13	24.08	0.00	75.05	--	--	<0.001	<0.001	<0.001	<0.002	<0.002	
MW-5	9/27/2000	--	99.13	23.95	0.00	75.18	--	--	--	--	--	--	--	
MW-5	5/5/2001	--	99.13	--	0.00	--	--	--	--	--	--	--	--	
MW-5	8/2/2001	--	99.13	23.84	0.00	75.29	--	--	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-5	10/2/2001	--	99.13	--	0.00	--	--	--	--	--	--	--	--	
MW-5	5/1/2002	--	161.01	24.1	0.00	136.91	--	--	--	--	--	--	--	
MW-5	9/20/2002	--	161.01	24.09	0.00	136.92	--	--	--	--	--	--	--	
MW-5	5/20/2003	--	161.01	--	0.00	--	--	--	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-5	10/2/2003	--	161.01	24.23	0.00	136.78	--	--	--	--	--	--	--	
MW-5	5/1/2004	--		DESTROYE	0.00									
MW-6	2/1/1992	--	--	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-6	5/1/1992	--	--	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-6	9/1/1992	--	--	--	0.00	75.22	--	--	--	--	--	--	--	Sample date accurate to month and year only
MW-6	8/1/1993	--	--	--	0.00	-	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-6	11/1/1993	--	--	--	0.00	75.29	--	--	--	--	--	--	--	Sample date accurate to month and year only
MW-6	8/2/2001	--		23.98	0.00	--	**0.00025**	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-6	09/21/2001	--	161.14	--	0.00	--	--	--	--	--	--	--	--	
MW-6	05/01/2004	--		DESTROYE	0.00									
MW-7	2/1/1992	--	97.82	--	0.00	--	--	--	**0.047**	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	5/1/1992	--	97.82	22.06	0.00	75.76	--	--	ND	ND	ND	**0.006**	--	Sample date accurate to month and year only
MW-7	9/1/1992	--	97.82	22.36	0.00	75.46	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	11/1/1992	--	97.82	22.41	0.00	75.41	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	5/1/1993	--	97.82	22.75	0.00	75.07	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	8/1/1993	--	97.82	22.64	0.00	75.18	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	11/1/1993	--	97.82	22.49	0.00	75.33	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	3/1/1994	--	97.82	22.43	0.00	75.39	--	--	ND	**0.011**	ND	**0.093**	--	Sample date accurate to month and year only
MW-7	6/1/1994	--	97.82	22.79	0.00	75.03	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	8/1/1994	--	97.82	22.88	0.00	74.94	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-7	12/22/1994	--	97.82	22.72	0.00	75.10	--	--	ND	ND	ND	**0.0026**	--	
MW-7	3/31/1995	--	97.82	--	0.00	--	--	--	--	--	--	--	--	

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Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-7	6/20/1995	--	97.82	22.27	0.00	75.55	--	--	ND	ND	ND	ND	--	
MW-7	8/23/1995	--	97.82	22.46	0.00	75.36	--	--	**0.00073**	ND	ND	**0.00073**	--	
MW-7	11/16/1995	--	97.82	22.6	0.00	75.22	--	--	**0.00051**	ND	ND	**0.0024**	--	
MW-7	1/30/1996	--	97.82	22.75	0.00	75.07	--	--	ND	ND	ND	**0.0017**	--	
MW-7	6/2/1996	--	97.82	--	0.00	--	--	--	--	--	--	--	--	
MW-7	8/26/1996	--	97.82	22.78	0.00	75.04	--	--	<0.0005	<0.0005	**0.00059**	**0.0083**	--	
MW-7	10/16/1996	--	97.82	23.44	0.00	74.38	--	--	<0.0005	<0.0005	**0.001**	**0.0063**	--	
MW-7	4/28/1997	--	97.82	23.08	0.00	74.74	--	--	--	--	--	--	--	
MW-7	9/10/1997	--	97.82	22.36	0.00	75.46	--	--	**0.0017**	<0.0005	<0.0005	**0.00294**	--	
MW-7	4/19/1998	--	97.82	22.9	0.00	74.92	--	--	<0.0005	<0.0005	<0.005	<0.002	--	
MW-7	9/23/1998	--	97.82	22.12	0.00	75.70	--	--	**0.000731**	<0.0005	**0.00568**	<0.0015	--	
MW-7	4/28/1999	--	97.82	22.71	0.00	75.11	--	--	**0.00091**	**0.00078**	**0.00197**	**0.00104**	<0.01	
MW-7	10/13/1999	--	97.82	22.64	0.00	75.18	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
MW-7	5/19/2000	--	97.82	22.99	0.00	74.83	--	--	<0.001	<0.001	<0.001	<0.002	<0.002	
MW-7	9/27/2000	--	97.82	22.98	0.00	74.84	--	--	<0.0005	<0.0005	**0.00619**	<0.002	<0.005	
MW-7	5/5/2001	--	97.82	23.29	0.00	74.53	--	--	<0.0005	<0.0005	**0.0006**	<0.001	<0.005	
MW-7	8/2/2001	--	97.82	22.75	0.00	75.07	**0.00211**	**0.0654**	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-7	10/2/2001	--	97.82	23.14	0.00	74.68	--	--	<0.0005	<0.0005	**0.00109**	<0.001	<0.001	
MW-7	5/1/2002	--	159.86	23.09	0.00	136.77	--	--	<0.0005	<0.0005	<0.0005	**0.00127**	<0.001	
MW-7	9/20/2002	--	159.86	22.95	0.00	136.91	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001 / 0.002	
MW-7	5/20/2003	--	159.86	23.44	0.00	136.42	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	Sample date defaulted to first date listed in historical data table
MW-7	10/2/2003	--	159.86	23.3	0.00	136.56	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.002	
MW-7	5/1/2004	--		DESTROYE	0.00									
MW-8	2/1/1992	--	--	--	0.00	--	--	--	**0.16**	**0.28**	**3.4**	**0.12**	--	Sample date accurate to month and year only
MW-8	5/1/1992	--	98.09	22.24	0.00	75.85	--	--	**0.11**	**0.2**	**2.3**	**9.9**	--	Sample date accurate to month and year only
MW-8	9/1/1992	--	98.09	22.43	0.00	75.66	--	--	**0.13**	**0.26**	**2.6**	**0.11**	--	Sample date accurate to month and year only
MW-8	11/1/1992	--	98.09	22.5		75.59	--	--	**0.9**	**0.17**	**1.3**	**7.5**	--	Sample date accurate to month and year only
MW-8	5/1/1993	--	98.09	22.84	0.00	75.25	--	--	**9.3**	**23.0**	**1.8**	**8.5**	--	Sample date accurate to month and year only
MW-8	8/1/1993	--	98.09	22.8	0.00	75.29	--	--	**11.0**	**25.0**	**1.7**	**12.0**	--	Sample date accurate to month and year only
MW-8	11/1/1993	--	98.09	22.54	0.00	75.55	--	--	**9.7**	**26.0**	**2.0**	**14.0**	--	Sample date accurate to month and year only
MW-8	3/1/1994	--	98.09	22.43	0.00	75.66	--	--	**6.4**	**25.0**	**1.8**	**13.0**	--	Sample date accurate to month and year only
MW-8	6/1/1994	--	98.09	22.43	0.00	75.66	--	--	**10.0**	**33.0**	**2.9**	**22.0**	--	Sample date accurate to month and year only
MW-8	8/1/1994	--	98.09	22.92	0.00	75.17	--	--	**8.4**	**39.0**	**2.7**	**19.0**	--	Sample date accurate to month and year only
MW-8	12/22/1994	--	98.09	22.74	0.00	75.35	--	--	**3.9**	**13.0**	**0.8**	**12.0**	--	
MW-8	3/31/1995	--	98.09	22.76	0.00	75.33	--	--	**4.8**	**13.0**	**1.4**	**9.6**	--	
MW-8	6/20/1995	--	98.09	22.32	0.00	75.77	--	--	**4.1**	**20.0**	**1.3**	**15.0**	--	
MW-8	8/23/1995	--	98.09	22.51	0.00	75.58	--	--	**3.6**	**21.0**	**1.9**	**20.0**	--	
MW-8	11/16/1995	--	98.09	22.59	0.00	75.50	--	--	**3.2**	**18.0**	**1.7**	**16.0**	--	
MW-8	1/30/1996	--	98.09	22.71	0.00	75.38	--	--	**3.4**	**23.0**	**2.0**	**20.0**	--	
MW-8	6/2/1996	--	98.09	22.57	0.00	75.52	--	--	**3.4**	**15.9**	**1.47**	**12.7**	--	
MW-8	8/26/1996	--	98.09	22.75	0.00	75.34	--	--	**2.43 / 2.86**	**16.8 / 18.8**	**1.44 / 1.63**	**18.4 / 20.5**	--	
MW-8	10/16/1996	--	98.09	23.42	0.00	74.67	--	--	**6.79**	**24.3**	**2.04**	**15.1**	--	
MW-8	4/28/1997	--	98.09	23.14	0.00	74.95	--	--	**4.27 / 4.54**	**9.78 / 13.9**	**1.29 / 1.37**	**8.56 / 9.29**	--	
MW-8	9/10/1997	--	98.09	22.43	0.00	75.66	--	--	**2.35**	**6.52**	**0.814**	**7.48**	--	
MW-8	4/19/1998	--	98.09	22.93	0.00	75.16	--	--	**1.14**	**6.79**	**0.571**	**12.9**	--	
MW-8	9/23/1998	--	98.09	22.36	0.00	75.73	--	--	**0.683**	**4.2**	**0.539**	**9.23**	--	
MW-8	9/21/2001	--	159.68	--	0.00	--	--	--	--	--	--	--	--	
					0.00									
MW-8R	9/24/2006	--	159.71	22.06	0.00	137.65	**2.3**	**22.0**	**0.075**	**1.8**	**0.72**	**4.1**	--	
MW-8R	5/14/2007	--	159.71	22.57	0.00	137.14	**4.1**	**49.0**	**0.16**	**4.5**	**2.1**	**10.0**	<0.001	
MW-8R	9/21/2007	--	159.71	22.6	0.00	137.11	**4.9**	**57.0**	**0.12**	**7.4**	**1.8**	**11.0**	--	
MW-8R	5/1/2008	--	159.71	22.79	0.00	136.92	**3.67**	**55.6**	**0.128**	**3.59**	**3.0**	**14.9**	--	
MW-8R	7/15/2008	--	159.71	22.49	0.00	137.22	**5.30**	**18.0**	**0.060**	**4.6**	**2.1**	**12.50**	--	
MW-8R	5/14/2009	--	159.71	22.71	0.00	137.00	**4.1**	**51**	**0.079**	**3.9**	**2.4**	**12.0**	--	
MW-8R	8/26/2009	--	159.71	22.9	0.00	136.81	**3.3 J**	**49**	**0.072**	**2.9**	**2.0**	**11.4**	--	

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Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-8R	4/20/2010	--	159.71	22.89	0.00	136.82	**6.7 / 6.4**	**40 J / 18 J**	**0.017 J / 0.017 J**	**0.50 / 0.51**	**1.1 / 1.2**	**6.3 / 6.7**	**--**	
					0.00									
MW-8RR	7/26/2011	--	159.55	22.84	0.00	136.71	**6.7**	**17**	**0.15**	**2.1**	**0.49**	**3.4**	**--**	
MW-8RR	11/10/2011	--	159.55	22.8	0.00	136.75	**0.78**	**0.030 J**	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	6/20/2012	--	159.55	22.21	0.00	137.34	**0.56**	**0.019 J**	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	11/5/2012	--	159.55	21.57	0.00	137.98	**--**	**--**	**--**	**--**	**--**	**--**	**--**	
MW-8RR	11/8/2012	--	159.55	--	0.00	--	**0.22 J**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	4/30/2013	--	159.55	22.61	0.00	136.94	<0.56	**0.048 J**	**0.0017**	**0.0029**	**0.0016**	**0.0117**	**--**	
MW-8RR	4/30/2013	--	159.55	22.61	0.00	136.94	**0.66**	<0.10	**0.000078 J**	**0.000084 J**	<0.000081	<0.00022	**--**	Collected via hydrasleeve
MW-8RR	11/7/2013	--	159.55	21.9	0.00	137.65	**-**	**-**	**-**	**-**	**-**	**-**	**--**	
MW-8RR	11/8/2013	--	159.55	--	0.00	--	**0.75**	<0.050	<0.00024	<0.00023	<0.00024	<0.00072	**--**	
MW-8RR	4/28/2014	--	159.55	22.32	0.00	137.23	**0.12 J**	<0.050	<0.00015	<0.00011	**0.00035 J**	<0.00040	**--**	
MW-8RR	4/28/2014	--	159.55	22.32	0.00	137.23	**0.37**	<0.050	<0.00015	<0.00011	<0.00016	<0.00040	**--**	Collected via hydrasleeve
MW-8RR	11/7/2014	--	159.55	22.73	0.00	136.82	**0.33 J**	<0.050	<0.00015	<0.00011	<0.00016	<0.00040	**--**	
MW-8RR	4/29/2015	--	159.55	23.03	0.00	136.52	**0.22 J**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	11/6/2015	--	159.55	22.32	0.00	137.23	**0.13 J**	<0.010	<0.001	<0.001	<0.001	<0.001	**--**	
MW-8RR	4/21/2016	--	159.55	22.96	0.00	136.59	**0.31**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	11/1/2016	--	159.55	22.6	0.00	136.95	**0.37 J**	**0.013 J**	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	5/1/2017	--	159.55	22.46	0.00	137.09	**0.60**	**0.014 J**	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	10/17/2017	--	159.55	23.35	0.00	136.20	**0.24 J**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
MW-8RR	4/27/2018	--	159.55	22.72		136.83	**0.12 J**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
MW-8RR	10/18/2018	--	159.55	22.67	0.00	136.88	**0.11 J**	<0.014	<0.0002	<0.0002	**0.0002 J**	**0.0009**	-	
MW-8RR	4/9/2019	--	166.43	22.51[2]	0.00	143.92	<0.25 B	<0.014	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	TPH-d Non detect reported to LOQ
MW-9	2/1/1992	--	--	--	0.00	--	**--**	**--**	**0.03**	**0.059**	**0.074**	**0.027**	**--**	Sample date accurate to month and year only
MW-9	5/1/1992	--	90.3	14.57	0.00	75.73	**--**	**--**	ND	**0.003**	**0.013**	**0.002**	**--**	Sample date accurate to month and year only
MW-9	9/1/1992	--	90.3	14.74	0.00	75.56	**--**	**--**	ND	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	11/1/1992	--	90.3	14.66	0.00	75.64	**--**	**--**	**0.003**	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	5/1/1993	--	90.3	15.11	0.00	75.19	**--**	**--**	ND	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	8/1/1993	--	90.3	15.12	0.00	75.18	**--**	**--**	ND	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	11/1/1993	--	90.3	14.96	0.00	75.34	**--**	**--**	ND	**0.011**	ND	ND	**--**	Sample date accurate to month and year only
MW-9	3/1/1994	--	90.3	14.99	0.00	75.31	**--**	**--**	ND	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	6/1/1994	--	90.3	15.23	0.00	75.07	**--**	**--**	ND	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	8/1/1994	--	90.3	15.48	0.00	74.82	**--**	**--**	ND	ND	ND	ND	**--**	Sample date accurate to month and year only
MW-9	12/22/1994	--	90.3	15.13	0.00	75.17	**--**	**--**	ND	ND	ND	ND	**--**	
MW-9	3/31/1995	--	90.3	14.98	0.00	75.32	**--**	**--**	ND	ND	ND	ND	**--**	
MW-9	6/20/1995	--	90.3	14.68	0.00	75.62	**--**	**--**	ND	ND	ND	ND	**--**	
MW-9	8/23/1995	--	90.3	15.02	0.00	75.28	**--**	**--**	ND	**0.00067**	ND	**0.0022**	**--**	
MW-9	11/16/1995	--	90.3	15	0.00	75.30	**--**	**--**	ND	ND	ND	ND	**--**	
MW-9	1/30/1996	--	90.3	15.22	0.00	75.08	**--**	**--**	ND	ND	ND	ND	**--**	
MW-9	6/2/1996	--	90.3	14.93	0.00	75.37	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	**--**	
MW-9	8/26/1996	--	90.3	15.5	0.00	74.80	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	**--**	
MW-9	10/16/1996	--	90.3	15.81	0.00	74.49	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	**--**	
MW-9	4/28/1997	--	90.3	15.5	0.00	74.80	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	**--**	
MW-9	9/10/1997	--	90.3	14.76	0.00	75.54	**--**	**--**	<0.001	<0.001	<0.001	<0.001	**--**	
MW-9	4/19/1998	--	90.3	15.35	0.00	74.95	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	**--**	
MW-9	9/23/1998	--	90.3	14.39	0.00	75.91	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	**--**	
MW-9	4/28/1999	--	90.3	14.98	0.00	75.32	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	
MW-9	10/13/1999	--	90.3	15.02	0.00	75.28	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
MW-9	5/19/2000	--	90.3	15.4	0.00	74.90	**--**	**--**	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.002 / <0.002	<0.002 / <0.002	
MW-9	9/27/2000	--	90.3	15.24	0.00	75.06	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-9	5/5/2001	--	90.3	15.69	0.00	74.61	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-9	8/2/2001	--	90.3	15.16	0.00	75.14	<0.001	<0.05	<0.001	<0.001	<0.001	<0.003	**--**	Sample date defaulted to first date listed in historical data table
MW-9	10/2/2001	--	90.3	--	0.00	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**	
MW-9	5/1/2002	--	152.33	15.38	0.00	136.95	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
MW-9	9/20/2002	--	152.33	15.32	0.00	137.01	**--**	**--**	<0.0005	<0.0005	<0.0005	<0.001	<0.001 / 0.002	

Table 3. Historical Groundwater Gauging and Analytical Results
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-9	5/20/2003	--	152.33	15.77	0.00	136.56	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	Sample date defaulted to first date listed in historical data table
MW-9	10/2/2003	--	152.33	15.54	0.00	136.79	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.002	
MW-9	6/1/2004	--	152.33	15.11	0.00	137.22	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.002	
MW-9	9/21/2004	--	152.33	15.58	0.00	136.75	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	<0.002 / <0.002	Sample date defaulted to first date listed in historical data table
MW-9	5/12/2005	--	152.33	15.26	0.00	137.07	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0015 / <0.0015	<0.0025 / <0.0025	
MW-9	9/19/2005	--	152.33	14.8	0.00	137.53	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	<0.0025 / <0.0025	
MW-9	5/8/2006	--	152.33	15.74	0.00	136.59	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-9	9/24/2006	--	152.34	14.88	0.00	137.46	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	--	
MW-9	5/14/2007	--	152.34	15.31	0.00	137.03	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.0005	
MW-9	9/21/2007	--	152.34	15.23	0.00	137.11	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	--	
MW-9	5/1/2008	--	152.34	15.37	0.00	136.97	--	--	<0.0005	<0.0005	<0.0005	<0.0015	--	
MW-9	7/15/2008	--	152.34	15.27	0.00	137.07	--	--	<0.0005	<0.0005	<0.0005	<0.0001	--	
MW-9	5/14/2009	--	152.34	16.37	0.00	135.97	--	**0.12**	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-9	8/26/2009	--	152.34	15.61	0.00	136.73	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-9	4/20/2010	--	152.34	15.6		136.74	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	9/5/2010	--	152.34	15.35	0.00	136.99	--	--	<0.0005	<0.0005	<0.0005	<0.0015	--	
MW-9	5/24/2011	--	152.34	15.74	0.00	136.60	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	11/10/2011	--	152.34	15.6	0.00	136.74	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	6/20/2012	--	152.34	15.02	0.00	137.32	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	11/5/2012	--	152.34	14.41	0.00	137.93	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	4/30/2013	--	152.34	15.37	0.00	136.97	--	--	<0.000062	<0.000077	<0.000081	<0.00022	--	
MW-9	4/30/2013	--	152.34	15.37	0.00	136.97	--	--	<0.000062	<0.000077	<0.000081	<0.00022	--	Collected via hydrasleeve
MW-9	11/7/2013	--	152.34	14.75	0.00	137.59	--	--	--	--	--	--	--	
MW-9	11/8/2013	--	--	--	0.00	--	--	--	<0.00024	<0.00023	<0.00024	<0.00072	--	
MW-9	4/28/2014	--	152.34	15.17	0.00	137.17	--	--	<0.00015	<0.00011	<0.00016	<0.00040	--	
MW-9	4/28/2014	--	152.34	15.17	0.00	137.17	--	--	<0.00015	<0.00011	<0.00016	<0.00040	--	Collected via hydrasleeve
MW-9	11/7/2014	--	152.34	15.56	0.00	136.78	--	--	<0.00015	<0.00011	<0.00016	<0.00040	--	
MW-9	4/29/2015	--	152.34	15.84	0.00	136.50	-	-	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	11/6/2015	--	152.34	15.16	0.00	137.18	--	--	<0.001	<0.001	<0.001	<0.001	--	
MW-9	4/21/2016	--	152.34	15.79	0.00	136.55	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	11/1/2016	--	152.34	15.43	0.00	136.91	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	5/1/2017	--	152.34	15.27	0.00	137.07	--	--	<0.003	<0.003	<0.003	<0.003	--	
MW-9	10/17/2017	--	152.34	15.15	0.00	137.19	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
MW-9	4/27/2018	--	152.34	15.52	0.00	136.82	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
MW-9	10/18/2018	--	152.34	15.44	0.00	136.90	--	--	<0.0002	<0.0002	<0.0002	<0.0005	-	
MW-9	4/9/2019	--	159.24	15.36[2]	0.00	143.88	<0.25 B	**0.087 J**	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	TPH-d Non detect reported to LOQ
MW-10	2/1/1992	--	--	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-10	9/1/1992	--	--	--	0.00	79.61	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-10	8/1/1993	--	--	--	0.00	79.29	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-10	8/2/2001	--	--	20.64	0.00	--	**0.00282**	<0.05	**0.00116**	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-10	9/21/2001	--	160.9	--	0.00	--	--	--	--	--	--	--	--	
MW-10	5/1/2004	--	DESTROYED - MAY 2004											
MW-11	2/1/1992	--	98.38	--	0.00	--	--	--	**0.08**	**ND**	**0.02**	**0.01**	--	Sample date accurate to month and year only
MW-11	5/1/1992	--	98.38	22.65	0.00	75.73	--	--	**1.6**	**8.7**	**1.2**	**0.20**	--	Sample date accurate to month and year only
MW-11	9/1/1992	--	98.38	22.76	0.00	75.62	--	--	**0.36**	--	**0.03**	**0.061**	--	Sample date accurate to month and year only
MW-11	11/1/1992	--	98.38	22.73	0.00	75.65	--	--	**1.2**	**0.074**	**0.02**	**0.004**	--	Sample date accurate to month and year only
MW-11	5/1/1993	--	98.38	23.06	0.00	75.32	--	--	**0.03**	ND	ND	ND	--	Sample date accurate to month and year only
MW-11	8/1/1993	--	98.38	23.05	0.00	75.33	--	--	**0.042**	ND	ND	ND	--	Sample date accurate to month and year only
MW-11	11/1/1993	--	98.38	22.87	0.00	75.51	--	--	**0.11**	ND	**0.11**	**0.1**	--	Sample date accurate to month and year only
MW-11	3/1/1994	--	98.38	22.82	0.00	75.56	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-11	6/1/1994	--	98.38	23.09	0.00	75.29	--	--	**0.012**	ND	**0.011**	**0.019**	--	Sample date accurate to month and year only
MW-11	8/1/1994	--	98.38	23.32	0.00	75.06	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-11	12/22/1994	--	98.38	23.02	0.00	75.36	--	--	ND	ND	ND	ND	--	
MW-11	3/31/1995	--	98.38	22.91	0.00	75.47	--	--	ND	ND	ND	ND	--	

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4417 Lake Otis Parkway
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Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-11	6/20/1995	--	98.38	22.57	0.00	75.81	--	--	**0.00072**	ND	ND	ND	--	
MW-11	8/23/1995	--	98.38	22.89	0.00	75.49	--	--	**0.0013**	ND	ND	ND	--	
MW-11	11/16/1995	--	98.38	22.88	0.00	75.50	--	--	**0.0016**	ND	ND	ND	--	
MW-11	1/30/1996	--	98.38	23.14	0.00	75.24	--	--	**0.00068**	ND	ND	ND	--	
MW-11	6/2/1996	--	98.38	22.82	0.00	75.56	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / 0.00063	<0.001 / <0.001	--	
MW-11	8/26/1996	--	98.38	23.31	0.00	75.07	--	--	**0.0016**	<0.0005	<0.0005	<0.001	--	
MW-11	10/16/1996	--	98.38	23.69	0.00	74.69	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	--	
MW-11	4/28/1997	--	98.38	23.38	0.00	75.00	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-11	9/10/1997	--	98.38	22.62		75.76	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-11	4/19/1998	--	98.38	23.22	0.00	75.16	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-11	9/23/1998	--	98.38	22.41	0.00	75.97	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-11	4/28/1999	--	98.38	22.86	0.00	75.52	--	--	<0.0005	**0.00063**	<0.0005	<0.0005	<0.01	
MW-11	10/13/1999	--	98.38	22.93	0.00	75.45	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
MW-11	5/19/2000	--	98.38	23.27	0.00	75.11	--	--	<0.001	<0.001	<0.001	<0.002	<0.002	
MW-11	9/27/2000	--	98.38	23.14	0.00	75.24	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-11	5/5/2001	--	98.38	23.59	0.00	74.79	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-11	8/0/2001	--	98.38	23.05	0.00	75.33	<0.001	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-11	10/2/2001	--	98.38	23.46	0.00	74.92	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
MW-11	5/1/2002	--	160.22	23.32	0.00	136.90	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
MW-11	9/20/2002	--	160.22	23.21	0.00	137.01	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001 / 0.002	
MW-11	5/20/2003	--	160.22	--	0.00	--	--	--	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-11	10/02/2003	--	160.22	--	0.00	--	--	--	--	--	--	--	--	
MW-11	5/1/2004	--		DESTROYE	0.00									
					0.00									
MW-12	2/1/1992	--	--	--	0.00	--	--	--	**0.0033**	ND	ND	**0.0038**	--	Sample date accurate to month and year only
MW-12	9/1/1992	--	--	--	0.00	77.00	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-12	8/1/1993	--	--	--	0.00	76.58	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-12	8/2/2001	--	--	22.51	0.00	--	**0.000252**	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-12	9/21/2001	--	160.78	--	0.00	--	--	--	--	--	--	--	--	
MW-12	5/1/2004	--		DESTROYE	0.00									
					0.00									
MW-14A	5/1/1992	--	--	--	0.00	75.72	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	9/1/1992	--	--	--	0.00	75.59	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	11/1/1992	--	--	--	0.00	75.64	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	5/1/1993	--	--	--	0.00	75.29	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	8/1/1993	--	--	--	0.00	75.29	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	11/1/1993	--	--	--	0.00	75.43	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	6/1/1994	--	--	--	0.00	75.23	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	8/1/1994	--	--	--		74.95	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14A	8/2/2001	--	--	23.03	0.00	--	**0.000321**	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-14A	9/21/2001	--	160.21	--	0.00	--	--	--	--	--	--	--	--	
MW-14A	5/1/2004	--		DESTROYE	0.00									
					0.00									
MW-14B	9/1/1992	--	--	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14B	8/1/1993	--	--	--	0.00	75.32	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-14B	8/2/2001	--	--	23.11	0.00	--	<0.001	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-14B	09/21/2001	--	160.2	--	0.00	--	--	--	--	--	--	--	--	
MW-14B	05/01/2004	--		DESTROYE	0.00									
					0.00									
MW-15	9/1/1992	--	--	--	0.00	--	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-15	11/1/1992	--	87.01	11.37	0.00	75.64	--	--	**0.002**	ND	ND	ND	--	Sample date accurate to month and year only
MW-15	5/1/1993	--	87.01	11.71	0.00	75.30	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-15	8/1/1993	--	87.01	11.71	0.00	75.30	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-15	11/1/1993	--	87.01	11.54	0.00	75.47	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-15	3/1/1994	--	87.01	11.52	0.00	75.49	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only
MW-15	6/1/1994	--	87.01	11.77	0.00	75.24	--	--	ND	ND	ND	ND	--	Sample date accurate to month and year only

Table 3. Historical Groundwater Gauging and Analytical Results
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-15	8/1/1994	--	87.01	12.02	0.00	74.99	--	--	ND	ND	ND	ND	--	
MW-15	12/22/1994	--	87.01	11.68	0.00	75.33	--	--	ND	ND	ND	ND	--	
MW-15	3/31/1995	--	87.01	11.53	0.00	75.48	--	--	ND	ND	ND	ND	--	
MW-15	6/20/1995	--	87.01	11.23	0.00	75.78	--	--	ND	ND	ND	ND	--	Trace NAPL
MW-15	8/23/1995	--	87.01	11.55	0.00	75.46	--	--	ND	ND	ND	ND	--	
MW-15	11/16/1995	--	87.01	11.55	0.00	75.46	--	--	ND	ND	ND	ND	--	
MW-15	1/30/1996	--	87.01	11.78	0.00	75.23	--	--	ND	ND	ND	ND	--	
MW-15	6/2/1996	--	87.01	11.48	0.00	75.53	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	Insufficient recharge
MW-15	8/26/1996	--	87.01	12.03	0.00	74.98	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-15	10/16/1996	--	87.01	12.5	0.00	74.51	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-15	4/28/1997	--	87.01	12.04	0.00	74.97	--	--	<0.0005	**0.000527**	<0.0005	<0.001	--	
MW-15	9/10/1997	--	87.01	11.29	0.00	75.72	--	--	<0.002	<0.002	<0.002	<0.002	--	
MW-15	4/19/1998	--	87.01	11.9	0.00	75.11	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-15	9/23/1998	--	87.01	11.06	0.00	75.95	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-15	4/28/1999	--	87.01	11.52	0.00	75.49	--	--	<0.0005	**0.00059**	<0.0005	<0.0005	<0.01	
MW-15	10/13/1999	--	87.01	11.57	0.00	75.44	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
MW-15	5/19/2000	--	87.01	11.95	0.00	75.06	--	--	<0.001	<0.001	<0.001	<0.002	<0.002	
MW-15	9/27/2000	--	87.01	11.8	0.00	75.21	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
MW-15	5/5/2001	--	87.01	--	0.00	--	--	--	--	--	--	--	--	
MW-15	10/20/2001	--	87.01	--	0.00	--	--	--	--	--	--	--	--	
MW-15	5/1/2002	--	148.9	--	0.00	--	--	--	--	--	--	--	--	
MW-15	9/20/2002	--	148.9	--	0.00	--	--	--	--	--	--	--	--	
MW-15	5/20/2003	--	148.9	--	0.00	--	--	--	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-15	10/2/2003	--	148.9	8.58	0.00	140.32	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.002	
MW-15	6/1/2004	--	148.9	--	0.00	--	--	--	--	--	--	--	--	
MW-15	9/21/2004	--	148.9	--	0.00	--	--	--	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-15	5/12/2005	--	148.9	--	0.00	--	--	--	--	--	--	--	--	
MW-15	9/19/2005	--	148.9	--	0.00	--	--	--	--	--	--	--	--	
MW-15	5/8/2006	--	148.9	--	0.00	--	--	--	--	--	--	--	--	
					0.00									
MW-16	8/2/2001	--	--	13.92	0.00	--	<0.0001	<0.05	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-16	10/2/2001	--	--	14.33	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	Car parked over well
MW-16	5/1/2002	--	151.08	14.12	0.00	136.96	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	Car parked over well
MW-16	9/20/2002	--	151.08	14.04	0.00	137.04	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001 / 0.002	
MW-16	5/20/2003	--	151.08	14.51	0.00	136.57	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	Sample date defaulted to first date listed in historical data table
MW-16	10/2/2003	--	151.08	14.3	0.00	136.78	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.002	
MW-16	6/1/2004	--	151.08	13.86	0.00	137.22	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.002	
MW-16	9/21/2004	--	151.08	14.32	0.00	136.76	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.002	Sample date defaulted to first date listed in historical data table
MW-16	5/12/2005	--	151.08	14.04	0.00	137.04	--	--	<0.0005	<0.0005	<0.0005	<0.0015	<0.0025	
MW-16	9/19/2005	--	151.08	13.53	0.00	137.55	--	--	<0.0005	<0.0005	<0.0005	<0.001	**0.0025**	
MW-16	5/8/2006	--	151.08	14.53	0.00	136.55	--	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.001 / <0.001	--	
MW-16	9/24/2006	--	152.13	13.69	0.00	138.44	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-16	5/14/2007	--	152.13	14.13	0.00	138.00	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.0005	
MW-16	9/12/2007	--	152.13	14.01	0.00	138.12	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
MW-16	5/1/2008	--	152.13	14.18	0.00	137.95	--	--	<0.0005	<0.0005	<0.0005	<0.0015	--	
MW-16	5/14/2009	--	152.13	FENCED, C	0.00									
					0.00									
MW-17	8/2/2001	--	--	11.7	0.00	--	**0.000118**	<0.05	<0.0001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-17	10/2/2001	--	--	12.12	0.00	--	--	--	<0.0005	<0.005	<0.005	<0.001	<0.001	
MW-17	5/1/2002	--	148.89	11.91	0.00	136.98	--	--	<0.0005	<0.005	<0.005	<0.001	<0.001	
MW-17	9/20/2002	--	148.89	11.86	0.00	137.03	--	--	<0.0005	<0.005	<0.005	<0.001	<0.001 / 0.002	
MW-17	5/20/2003	--	148.89	12.3	0.00	136.59	--	--	<0.0005	<0.005	<0.005	<0.001	<0.0005	Sample date defaulted to first date listed in historical data table
MW-17	10/2/2003	--	148.89	12.07	0.00	136.82	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.002	
MW-17	6/1/2004	--	148.89	11.65	0.00	137.24	--	--	<0.0005 / <0.0005	<0.0005 / <0.0007	<0.0005 / <0.0008	<0.001 / <0.0008	<0.002 / <0.002	
MW-17	9/21/2004	--	148.89	12.13	0.00	136.76	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.002	Sample date defaulted to first date listed in historical data table
MW-17	5/12/2005	--	148.89	11.81	0.00	137.08	--	--	--	--	--	--	--	

Table 3. Historical Groundwater Gauging and Analytical Results
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
MW-17	9/19/2005	--	148.89	11.45	0.00	137.44	--	--	--	--	--	--	--	
MW-17	5/8/2006	--	148.89	13.56	0.00	135.33	--	--	--	--	--	--	--	
MW-17	9/24/2006	--	148.91	12.69	0.00	136.22	--	--	--	--	--	--	--	
MW-17	5/14/2007	--	148.91	13.27	0.00	135.64	--	--	--	--	--	--	--	
MW-17	9/21/2007	--	148.91	11.77	0.00	137.14	--	--	--	--	--	--	--	
MW-17	5/1/2008	--	148.91	11.9	0.00	137.01	--	--	--	--	--	--	--	
MW-17	5/14/2009	--	148.91	FENCED, C	0.00									
					0.00									
MW-18	8/2/2001	--	--	13.3	0.00	--	**0.0132**	**0.162**	<0.001	<0.001	<0.001	<0.003	--	Sample date defaulted to first date listed in historical data table
MW-18	10/2/2001	--	--	13.46		--	--	--	<0.0005	<0.0005	**0.00139**	**0.0112**	<0.001	
MW-18	5/1/2002	--	150.5	12.88	0.00	137.62	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
MW-18	9/20/2002	--	150.5	13.17	0.00	137.33	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001 / 0.002	
MW-18	5/20/2003	--	150.5	13.6	0.00	136.90	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	Sample date defaulted to first date listed in historical data table
MW-18	10/2/2003	--	150.5	14.23	0.00	136.27	--	--	<0.0005	<0.0007	<0.0008	<0.0016	<0.002	
MW-18	6/1/2004	--	150.5	12.96	0.00	137.54	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.002	
MW-18	9/21/2004	--	150.5	14.01	0.00	136.49	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.002	Sample date defaulted to first date listed in historical data table
MW-18	5/12/2005	--	150.5	13.06	0.00	137.44	--	--	--	--	--	--	--	
MW-18	9/19/2005	--	150.5	12.74	0.00	137.76	--	--	--	--	--	--	--	
MW-18	05/08/2006	--	150.78	--	0.00	--	--	--	--	--	--	--	--	
					0.00									
Trip Blank	1/30/1996	--	--	--	0.00	--	--	--	ND	ND	ND	ND	--	
Trip Blank	6/2/1996	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	8/26/1996	--	--	--	0.00	--	--	--	<0.0005	**0.00061**	<0.0005	<0.001	--	
Trip Blank	10/16/1996	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	4/28/1997	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	9/10/1997	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	4/19/1998	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	9/23/1998	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	4/28/1999	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	
Trip Blank	10/13/1999	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	
Trip Blank	9/27/2000	--	--	--	0.00	--	--	--	<0.0005	**0.000572**	<0.0005	<0.001	<0.005	
Trip Blank	5/5/2001	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.005	
Trip Blank	10/2/2001	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
Trip Blank	5/1/2002	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.001	
Trip Blank	9/20/2002	--	--	--	0.00	--	--	--	<0.0005	**0.000518**	<0.0005	<0.001	<0.001	
Trip Blank	5/20/2003	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	Sample date defaulted to first date listed in historical data table
Trip Blank	10/2/2003	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
Trip Blank	6/1/2004	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
Trip Blank	9/21/2004	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	Sample date defaulted to first date listed in historical data table
Trip Blank	5/12/2005	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0015	<0.0025	
Trip Blank	9/19/2005	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0015	<0.0025	
Trip Blank	5/8/2006	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	
Trip Blank	9/24/2006	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	5/14/2007	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	
Trip Blank	9/21/2007	--	--	--	0.00	--	--	--	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	5/1/2008	--	--	--	0.00	--	--	<0.05	<0.0005	<0.0005	<0.0005	<0.0015	--	
Trip Blank	7/15/2008	--	--	--	0.00	--	--	<0.01	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	4/30/2009	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	8/19/2009	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	4/20/2010	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	6/10/2010	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.001	--	
Trip Blank	8/27/2010	--	--	--	0.00	--	--	--	<0.010	<0.0005	<0.0005	<0.0005	--	
Trip Blank	5/24/2011	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	
Trip Blank	7/26/2011	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	
Trip Blank	11/10/2011	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	
Trip Blank	6/20/2012	--	--	--	0.00	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	

Table 3. Historical Groundwater Gauging and Analytical Results
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4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft amsl)	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft amsl)	TPH-d (mg/L)	TPH-g (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Comments
ADEC Groundwater Cleanup Levels							**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**	**0.14**	
Trip Blank	11/5/2012	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
Trip Blank	4/30/2013	--	--	--	0.00	--	**--**	<0.10	<0.000062	<0.000077	<0.000081	<0.00022	**--**	
Trip Blank	11/08/2013	--	--	--	0.00	--	**--**	<0.050	<0.00024	<0.00023	<0.00024	<0.00072	**--**	
Trip Blank	4/28/2014	--	--	--	0.00	--	**--**	<0.050	<0.00015	<0.00011	<0.00016	<0.00040	**--**	Car parked over well
Trip Blank	11/7/2014	--	--	--	0.00	--	**--**	<0.050	<0.00015	**0.00012 J**	<0.00016	<0.00040	**--**	
Trip Blank	4/29/2015	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
Trip Blank	11/6/2015	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
Trip Blank	4/21/2016	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
Trip Blank	11/1/2016	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
Trip Blank	10/17/2017	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	**--**	
Trip Blank	4/27/2018	--	--	--	0.00	--	**--**	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Trip Blank	10/18/2018	--	-	-	0.00	-	**-**	<0.014	<0.0002	<0.0002	<0.0002	<0.0005	**--**	
Trip Blank	4/3/2019	--	--	--	--	--	**--**	<0.014	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	
					0.00									
Tudor Motel	9/21/2007	--	--	--	0.00	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**	
Tudor Motel	5/1/2008	--	--	--	0.00	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**	
Tudor Motel	7/15/2008	--	--	--	0.00	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**	

Notes:

ID = Identification
MW = Groundwater monitoring well
TOC = Top of casing
DTW = Depth to groundwater
ft bTOC = Feet below top of casing
ft = Feet
mg/L = Milligrams per liter
GW Elev = Groundwater elevation
Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level
Bold = Value exceeds MDL
<0.0002 = Not detected at or above the method detection limit (MDL)
NAVD 88 = North American Vertical Datum of 1988
LNAPL = Light Non-Aqueous Phase Liquid
[BD] = Blind Duplicate Sample Result
QA (TB) = Quality Assurance (Trip Blank)
-- = Not Measured/Not analysed
ADEC = Alaska Department of Environmental Conservation

TPH-g = Total petroleum hydrocarbons, gasoline range by LUFT GC/MS according to United States Environmental Protection Agency (USEPA) Method AK 101
TPH-d = Total petroleum hydrocarbons, diesel range by LUFT GC/MS according to USEPA Method AK 102-SV 4/8/02
Samples analyzed by USEPA SW-846 8260C
Benzene, toluene, ethylbenzene and total xylenes (collectively BTEX)
MTBE = Methyl tert-butyl ether
UB { represented as < [MDL] B } = Compound considered non-detect at the listed value due to associated blank contamination
J = Esimated value between MDL and Limit of Quantitation (LOQ)

Table 4. Historical Groundwater Analytical Results - Additional VOCs
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)	Comments
ADEC Groundwater Cleanup Levels		**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**	
MW-1	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-1	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-1	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-1	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-1	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-1	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-1	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-1	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-1	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-1	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-1	12/22/1994	--	--	--	--	--	
MW-1	3/31/1995	--	--	--	--	--	
MW-1	6/20/1995	--	--	--	--	--	
MW-1	8/23/1995	--	--	--	--	--	
MW-1	11/16/1995	--	--	--	--	--	
MW-1	1/30/1996	--	--	--	--	--	
MW-1	6/2/1996	--	--	--	--	--	
MW-1	8/26/1996	--	--	--	--	--	
MW-1	10/16/1996	--	--	--	--	--	
MW-1	4/28/1997	--	--	--	--	--	
MW-1	9/10/1997	--	--	--	--	--	
MW-1	4/19/1998	--	--	--	--	--	
MW-1	9/23/1998	--	--	--	--	--	
MW-1	4/28/1999	--	--	--	--	--	
MW-1	5/5/2001	--	--	--	--	--	
MW-1	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-1	10/2/2001	--	--	--	--	--	
MW-1	5/1/2002	--	--	--	--	--	
MW-1	9/20/2002	--	--	--	--	--	
MW-1	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-1	10/2/2003	--	--	--	--	--	
MW-1	5/1/2004			DESTROYED - MAY 2004			
MW-1R	9/24/2006	--	--	--	--	--	
MW-1R	5/14/2007	--	--	--	--	--	
MW-1R	9/21/2007	--	--	--	--	--	
MW-1R	5/1/2008	**0.0182**	**0.004**	<0.005	<0.07	<0.005	
MW-1R	7/15/2008	**0.021**	<0.01	<0.008	<0.008	**0.021**	
MW-1R	5/14/2009	<0.005 / <0.005	<0.010 / <0.010	<0.008 / <0.008	<0.008 / <0.008	<0.020 / <0.020	
MW-1R	8/26/2009	<0.005J / **0.021 J**	<0.010 / <0.010	<0.008 / <0.008	<0.008 / <0.008	<0.020 / <0.020	
MW-1R	6/15/2010	**0.014 J / 0.010 J**	<0.010 / <0.010	<0.008 / <0.008	<0.008 / <0.008	<0.020 / <0.020	
MW-1R	9/5/2010	<0.003 / <0.003	<0.005 / <0.005	<0.004 / <0.004	<0.004 / <0.004	<0.010 / <0.010	
MW-1R	5/24/2011	**0.012**	0.001 J	<0.0008	<0.0008	<0.002	
MW-1R	5/24/2011	**0.012**	0.001 J	<0.0008	<0.0008	<0.002	
MW-1R	11/10/2011	**0.004 J / 0.007 J**	<0.001 / <0.001	<0.0008 / <0.0008	<0.0008 / <0.0008	<0.002 / <0.002	
MW-1R	6/20/2012	**0.004 J / 0.004 J**	<0.001 / <0.001	0.0009 J / <0.0008	<0.0008 / <0.0008	<0.002 / <0.002	
MW-1R	11/5/2012	0.0008 J / 0.0008 J	<0.001 / <0.001	<0.0008 / <0.0008	<0.0008 / <0.0008	<0.002 / <0.002	
MW-1R	4/30/2013	**0.003 / 0.0033**	0.00013 J / 0.00015 J	0.0013 / 0.0012	<0.000085 / <0.000085	<0.002 / <0.002	
MW-1R	4/30/2013	**0.0028 / 0.0034**	0.00011 J / 0.00012 J	0.0012 / 0.001	<0.000085 / <0.000085	<0.002 / <0.002	collected via hydrasleeve
MW-1R	11/8/2013	**0.0042 J / 0.0030 J**	<0.00060 / <0.00060	0.0021 J / 0.0020 J	<0.0011 / <0.0011	<0.010 / <0.010	
MW-1R	4/28/2014	**0.0037 / 0.0037**	0.00065 / 0.00061	0.0024 / 0.0022	<0.00013 / <0.00013	<0.0020 / <0.0020	
MW-1R	4/28/2014	<0.00066 UJ / 0.0038 J	<0.00046 / 0.00066	<0.00078 UJ / 0.0017 J	<0.00066 / <0.00013	<0.010 / <0.0020	collected via hydrasleeve
MW-1R	11/7/2014	<0.00066 / 0.0021 J	<0.00046 / <0.00046	0.0019 J / 0.0016 J	<0.00066 / <0.00066	<0.010 / <0.010	
MW-1R	4/29/2015	**0.003**	<0.0005	<0.0005	<0.0005	<0.002	
MW-1R	11/6/2015	<0.001	<0.001	<0.001	<0.001	<0.004	
MW-1R	4/21/2016	0.001	<0.0005	<0.0005	<0.0005	<0.002	
MW-1R	11/1/2016	**0.002**	<0.0005	<0.0005	<0.0005	<0.002	
MW-1R	5/1/2017	0.001	<0.0005	0.0007 J	<0.0005	<0.002	
MW-1R	10/17/2017	0.001	<0.0005	<0.0005	<0.0005	<0.0005	
MW-1R	4/27/2018	**0.002**	<0.0005	<0.0005	<0.0005	<0.0005	
MW-1R	10/18/2018	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	
MW-1R	4/9/2019	0.001 [0.001]	<0.0002 [<0.0002]	<0.0002 [0.0004 J]	<0.0002 [<0.0002]	<0.0003 [<0.0003]	
MW-2R	9/24/2006	--	--	--	--	--	
MW-2R	5/14/2007	--	--	--	--	--	
MW-2R	9/21/2007	--	--	--	--	--	
MW-2R	5/1/2008	**0.0568 / 0.0505**	<0.005 / <0.005	<0.005 / 0.00079	<0.07 / <0.07	<0.005 / <0.005	
MW-2R	7/15/2008	**0.035 / 0.037**	<0.005 / <0.005	<0.004 / <0.005	<0.004 / <0.07	<0.010 / <0.005	
MW-2R	5/14/2009	**0.027**	<0.002	<0.002	<0.002	<0.004	
MW-2R	8/26/2009	**0.056**	<0.005	<0.004	<0.004	<0.010	
MW-2R	6/15/2010	**0.017**	<0.001	<0.0008	<0.0008	<0.002	
MW-2R	9/5/2010	**0.008**	<0.001	0.001 J	<0.0008	<0.002	
MW-2R	5/24/2011	**0.016 / 0.015**	<0.001 / <0.001	<0.0008 / <0.0008	<0.0008 / <0.0008	<0.002 / <0.002	
MW-2R	11/10/2011	**0.012**	<0.001	<0.0008	<0.0008	<0.002	
MW-2R	6/20/2012	**0.011**	<0.001	<0.0008	<0.0008	<0.002	
MW-2R	11/8/2012	0.002 J	<0.001	<0.0008	<0.0008	<0.002	
MW-2R	4/30/2013	**0.0091**	<0.000083	0.00089 J	0.00022 J	<0.002	
MW-2R	4/30/2013	0.0049	<0.000083	0.00045 J	<0.000085	<0.002	collected via hydrasleeve
MW-2R	11/8/2013	**0.0053**	<0.00012	0.00047 J	<0.00023	<0.0020	
MW-2R	4/28/2014	**0.011**	<0.000091	0.00077 J	<0.00013	<0.0020	
MW-2R	4/28/2014	**0.0021**	<0.000091	0.00027 J	<0.00013	<0.0020	collected via hydrasleeve
MW-2R	11/7/2014	<0.00066	<0.00046	<0.00078	<0.00066	<0.010	
MW-2R	4/29/2015	**0.003 / 0.003**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.002 / <0.002	
MW-2R	11/6/2015	**0.002** / <0.003	<0.001 / <0.003	<0.001 / <0.003	<0.001 / <0.003	<0.004 / <0.010	
MW-2R	4/21/2016	**0.008 / 0.009 J**	<0.0005 / <0.005	0.0006 J / <0.005	<0.0005 / <0.005	<0.002 / <0.02	
MW-2R	11/1/2016	**0.011 / 0.011**	<0.0005 / <0.0005	0.0008 J / 0.0008 J	<0.0005 / <0.0005	<0.002 / <0.002	
MW-2R	5/1/2017	**0.007 / 0.008**	<0.0005 / <0.0005	0.0006 J / 0.0006 J	<0.0005 / <0.0005	<0.002 / <0.002	
MW-2R	10/17/2017	**0.009 / 0.009**	<0.0005 / <0.0005	0.0009 J / 0.0008 J	<0.0005 / <0.0005	<0.0005 / <0.0005	
MW-2R	4/27/2018	**0.007 / 0.007**	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	
MW-2R	10/18/2018	**0.003 J / 0.003 J**	<0.0002 / <0.0002	<0.0002 / <0.0002	<0.0002 / <0.0002	<0.0002 / <0.0002	
MW-2R	4/9/2019	**0.005**	<0.0002	0.0004 J	<0.0002	<0.0003	
MW-3	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-3	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-3	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-3	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-3	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-3	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-3	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-3	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-3	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-3	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-3	12/22/1994	--	--	--	--	--	
MW-3	4/10/1995	--	--	--	--	--	
MW-3	6/20/1995	--	--	--	--	--	

Table 4. Historical Groundwater Analytical Results - Additional VOCs
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)	Comments
ADEC Groundwater Cleanup Levels		**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**	
MW-3	6/21/1995	--	--	--	--	--	
MW-3	8/23/1995	--	--	--	--	--	
MW-3	11/16/1995	--	--	--	--	--	
MW-3	1/30/1996	--	--	--	--	--	
MW-3	6/2/1996	--	--	--	--	--	
MW-3	8/26/1996	--	--	--	--	--	
MW-3	10/16/1996	--	--	--	--	--	
MW-3	4/28/1997	--	--	--	--	--	
MW-3	9/10/1997	--	--	--	--	--	
MW-3	4/19/1998	--	--	--	--	--	
MW-3	9/23/1998	--	--	--	--	--	
MW-3	4/28/1999	--	--	--	--	--	
MW-3	10/13/1999	--	--	--	--	--	
MW-3	5/19/2000	--	--	--	--	--	
MW-3	9/27/2000	--	--	--	--	--	
MW-3	5/5/2001	--	--	--	--	--	
MW-3	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-3	10/2/2001	--	--	--	--	--	
MW-3	5/1/2002	--	--	--	--	--	
MW-3	9/20/2003	--	--	--	--	--	
MW-3	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-3	10/2/2003	--	--	--	--	--	
MW-3	5/1/2004			DESTROYED - MAY 2004			
MW-4	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-4	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-4	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-4	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-4	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-4	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-4	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-4	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-4	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-4	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-4	12/22/1994	--	--	--	--	--	
MW-4	3/31/1995	--	--	--	--	--	
MW-4	6/20/1995	--	--	--	--	--	
MW-4	8/23/1995	--	--	--	--	--	
MW-4	11/16/1995	--	--	--	--	--	
MW-4	1/30/1996	--	--	--	--	--	
MW-4	6/2/1996	--	--	--	--	--	
MW-4	8/26/1996	--	--	--	--	--	
MW-4	4/28/1997	--	--	--	--	--	
MW-4	9/10/1997	**--**	**--**	**--**	**--**	**--**	
MW-4	4/19/1998	**--**	**--**	**--**	**--**	**--**	
MW-4	9/23/1998	**--**	**--**	**--**	**--**	**--**	
MW-4	5/2/1999	**--**	**--**	**--**	**--**	**--**	
MW-4	10/13/1999	--	--	--	--	--	
MW-4	5/19/2000	--	--	--	--	--	
MW-4	9/27/2000	--	--	--	--	--	
MW-4	5/5/2001	--	--	--	--	--	
MW-4	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-4	10/2/2001	--	--	--	--	--	
MW-4	5/1/2002	--	--	--	--	--	
MW-4	9/20/2002	--	--	--	--	--	
MW-4	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-4	10/2/2003	--	--	--	--	--	
MW-4	5/1/2004			DESTROYED - MAY 2004			
MW-5	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-5	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-5	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-5	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-5	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-5	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-5	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-5	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-5	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-5	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-5	12/22/1994	--	--	--	--	--	
MW-5	3/31/1995	--	--	--	--	--	
MW-5	6/20/1995	--	--	--	--	--	
MW-5	8/23/1995	--	--	--	--	--	
MW-5	11/16/1995	--	--	--	--	--	
MW-5	1/30/1996	--	--	--	--	--	
MW-5	6/2/1996	--	--	--	--	--	
MW-5	8/26/1996	--	--	--	--	--	
MW-5	10/16/1996	--	--	--	--	--	
MW-5	4/28/1997	--	--	--	--	--	
MW-5	9/10/1997	--	--	--	--	--	
MW-5	4/19/1998	--	--	--	--	--	
MW-5	9/23/1998	--	--	--	--	--	
MW-5	4/28/1999	--	--	--	--	--	
MW-5	10/13/1999	--	--	--	--	--	
MW-5	5/19/2000	--	--	--	--	--	
MW-5	9/27/2000	--	--	--	--	--	
MW-5	5/5/2001	--	--	--	--	--	
MW-5	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-5	10/2/2001	--	--	--	--	--	
MW-5	5/1/2002	--	--	--	--	--	
MW-5	9/20/2002	--	--	--	--	--	
MW-5	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-5	10/2/2003	**--**	**--**	**--**	**--**	**--**	
MW-5	5/1/2004			DESTROYED - MAY 2004			
MW-6	2/1/1992	**--**	**--**	**--**	**--**	**--**	Sample date accurate to month and year only
MW-6	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-6	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-6	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-6	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-6	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-6	9/21/2001	--	--	--	--	--	
MW-6	5/1/2004			DESTROYED - MAY 2004			
MW-7	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-7	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only

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4417 Lake Otis Parkway
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Well ID	Sample Date	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)	Comments
ADEC Groundwater Cleanup Levels		**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**	
MW-7	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-7	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-7	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-7	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-7	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-7	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-7	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-7	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-7	12/22/1994	--	--	--	--	--	
MW-7	3/31/1995	--	--	--	--	--	
MW-7	6/20/1995	--	--	--	--	--	
MW-7	8/23/1995	--	--	--	--	--	
MW-7	11/16/1995	--	--	--	--	--	
MW-7	1/30/1996	--	--	--	--	--	
MW-7	6/2/1996	--	--	--	--	--	
MW-7	8/26/1996	--	--	--	--	--	
MW-7	10/16/1996	--	--	--	--	--	
MW-7	4/28/1997	--	--	--	--	--	
MW-7	9/10/1997	--	--	--	--	--	
MW-7	04/19/1998	--	--	--	--	--	
MW-7	09/23/1998	--	--	--	--	--	
MW-7	04/28/1999	--	--	--	--	--	
MW-7	10/13/1999	--	--	--	--	--	
MW-7	05/19/2000	--	--	--	--	--	
MW-7	9/27/2000	--	--	--	--	--	
MW-7	5/5/2001	--	--	--	--	--	
MW-7	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-7	10/2/2001	--	--	--	--	--	
MW-7	5/1/2002	--	--	--	--	--	
MW-7	9/20/2002	--	--	--	--	--	
MW-7	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-7	10/2/2003	--	--	--	--	--	
MW-7	5/1/2004			DESTROYED - MAY 2004			
MW-8	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-8	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-8	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-8	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-8	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-8	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-8	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-8	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-8	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-8	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-8	12/22/1994	--	--	--	--	--	
MW-8	3/31/1995	--	--	--	--	--	
MW-8	6/20/1995	--	--	--	--	--	
MW-8	8/23/1995	--	--	--	--	--	
MW-8	11/16/1995	--	--	--	--	--	
MW-8	1/30/1996	--	--	--	--	--	
MW-8	6/2/1996	--	--	--	--	--	
MW-8	8/26/1996	--	--	--	--	--	
MW-8	10/16/1996	--	--	--	--	--	
MW-8	4/28/1997	--	--	--	--	--	
MW-8	9/10/1997	--	--	--	--	--	
MW-8	4/19/1998	--	--	--	--	--	
MW-8	9/23/1998	--	--	--	--	--	
MW-8	9/21/2001	--	--	--	--	--	
MW-8R	9/24/2006	--	--	--	--	--	
MW-8R	5/14/2007	--	--	--	--	--	
MW-8R	9/21/2007	--	--	--	--	--	
MW-8R	5/1/2008	**0.0174**	<0.005	0.00695	<0.07	<0.005	
MW-8R	7/15/2008	**0.011**	<0.010	<0.008	<0.008	<0.020	
MW-8R	5/14/2009	<0.003	<0.005	0.005	<0.004	<0.010	
MW-8R	8/26/2009	<0.005	<0.010	<0.008	<0.008	0.023 J	
MW-8R	4/20/2010	**0.004 J /0.004 J**	<0.005 / <0.005	0.005 J / <0.004	<0.004 / <0.004	<0.010 / <0.010	
MW-8RR	7/26/2011	**0.024**	<0.002	0.011	<0.002	<0.004	
MW-8RR	11/10/2011	**0.005**	<0.001	<0.0008	<0.0008	<0.002	
MW-8RR	6/20/2012	**0.002 J**	<0.001	0.0008 J	<0.0008	<0.002	
MW-8RR	11/8/2012	0.0006 J	<0.001	0.002 J	<0.0008	<0.002	
MW-8RR	4/30/2013	**0.0033**	<0.000083	0.0019	<0.000085	<0.002	
MW-8RR	4/30/2013	**0.0025**	<0.000083	0.002	0.00023 J	<0.002	collected via hydrasleeve
MW-8RR	11/8/2013	0.00055 J	<0.00012	0.0032	<0.00023	<0.0020	
MW-8RR	4/28/2014	0.00065 J	<0.000091	0.0042	<0.00013	<0.0020	
MW-8RR	4/28/2014	0.00061 J	<0.000091	0.0042	<0.00013	<0.0020	collected via hydrasleeve
MW-8RR	11/7/2014	0.0013	<0.000091	0.0024	<0.00013	<0.0020	
MW-8RR	4/29/2015	0.001	<0.0005	0.001	<0.0005	<0.002	
MW-8RR	11/6/2015	<0.001	<0.001	<0.001	<0.001	<0.004	
MW-8RR	4/21/2016	<0.001	<0.0005	0.002	<0.0005	<0.002	
MW-8RR	11/1/2016	0.001	<0.0005	0.004	<0.0005	<0.002	
MW-8RR	5/1/2017	0.002	<0.0005	0.004	<0.0005	<0.002	
MW-8RR	10/17/2017	**0.001**	<0.0005	**0.003**	<0.0005	<0.0005	
MW-8RR	4/27/2018	**0.001**	<0.0005	**0.002**	<0.0005	<0.0005	
MW-8RR	10/18/2018	**0.003 J**	<0.0002	**0.003**	<0.0002	<0.0002	
MW-8RR	4/9/2019	0.001	<0.0002	0.003 J	<0.0002	<0.0003	
MW-9	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-9	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-9	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-9	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-9	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-9	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-9	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-9	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-9	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-9	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-9	12/22/1994	--	--	--	--	--	
MW-9	3/31/1995	--	--	--	--	--	
MW-9	6/20/1995	--	--	--	--	--	
MW-9	8/23/1995	--	--	--	--	--	
MW-9	11/16/1995	--	--	--	--	--	
MW-9	1/30/1996	--	--	--	--	--	
MW-9	6/2/1996	--	--	--	--	--	
MW-9	8/26/1996	--	--	--	--	--	

Table 4. Historical Groundwater Analytical Results - Additional VOCs
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)	Comments
ADEC Groundwater Cleanup Levels		**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**	
MW-9	10/16/1996	--	--	--	--	--	
MW-9	4/28/1997	--	--	--	--	--	
MW-9	9/10/1997	--	--	--	--	--	
MW-9	4/19/1998	--	--	--	--	--	
MW-9	9/23/1998	--	--	--	--	--	
MW-9	4/28/1999	--	--	--	--	--	
MW-9	10/13/1999	--	--	--	--	--	
MW-9	5/19/2000	--	--	--	--	--	
MW-9	9/27/2000	--	--	--	--	--	
MW-9	5/5/2001	--	--	--	--	--	
MW-9	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-9	10/2/2001	--	--	--	--	--	
MW-9	5/1/2002	--	--	--	--	--	
MW-9	9/20/2002	--	--	--	--	--	
MW-9	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-9	10/2/2003	--	--	--	--	--	
MW-9	6/1/2004	--	--	--	--	--	
MW-9	9/21/2004	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-9	5/12/2005	--	--	--	--	--	
MW-9	9/19/2005	--	--	--	--	--	
MW-9	5/8/2006	--	--	--	--	--	
MW-9	9/24/2006	--	--	--	--	--	
MW-9	5/14/2007	--	--	--	--	--	
MW-9	9/21/2007	--	--	--	--	--	
MW-9	5/1/2008	<0.005	**0.05**	**0.27**	**0.119**	<0.005	
MW-9	7/15/2008	<0.0005	**0.043**	**0.21**	**0.097**	<0.002	
MW-9	5/14/2009	<0.0005	**0.025**	**0.097**	**0.064**	<0.002	
MW-9	8/26/2009	<0.0005	**0.036**	**0.20**	<0.0008	<0.002	
MW-9	4/20/2010	<0.0005	**0.044**	**0.28 J**	**0.13**	<0.002	
MW-9	9/5/2010	**--**	**--**	**--**	**--**	**--**	
MW-9	5/24/2011	<0.0005	**0.011**	**0.055**	**0.032**	<0.002	
MW-9	11/10/2011	<0.0005	**0.005**	**0.034**	**0.013**	<0.002	
MW-9	6/20/2012	<0.0005	**0.006**	0.013	0.014	<0.002	
MW-9	4/30/2013	<0.00037	**0.0492**	**0.293**	**0.114**	<0.002	
MW-9	4/30/2013	<0.00037	**0.0441**	**0.216**	**0.112**	<0.002	collected via hydrasleeve
MW-9	11/8/2013	<0.00022	**0.0055**	0.024	0.013	<0.0020	
MW-9	4/28/2014	<0.00013	**0.033**	**0.18**	**0.064**	<0.0020	
MW-9	4/28/2014	<0.00013	<0.0041	0.018	0.0067	<0.0020	collected via hydrasleeve
MW-9	11/7/2014	<0.00013	**0.023**	**0.12**	**0.040**	<0.0020	
MW-9	4/29/2015	<0.0005	**0.003**	0.008	0.005	<0.002	
MW-9	11/6/2015	<0.001	**0.025**	**0.12**	**0.078**	<0.004	
MW-9	4/21/2016	<0.0005	**0.003**	0.012	0.007	<0.002	
MW-9	11/1/2016	<0.0005	**0.003**	0.012	0.007	<0.002	
MW-9	5/1/2017	<0.003	**0.008**	0.026	0.030	<0.010	
MW-9	10/17/2017	<0.0005	**0.003**	0.012	0.01	<0.0005	
MW-9	4/27/2018	<0.0005	**0.014**	**0.054**	**0.039**	<0.0005	
MW-9	10/18/2018	<0.002	**0.022**	**0.082**	**0.064**	<0.0002	
MW-9	4/9/2019	<0.0003	**0.023**	**0.085**	**0.067**	<0.0003	
MW-10	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-10	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-10	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-10	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-10	9/21/2001	--	--	--	--	--	
MW-10	5/1/2004			DESTROYED - MAY 2004			
MW-11	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-11	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-11	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-11	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-11	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-11	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-11	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-11	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-11	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-11	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-11	12/22/1994	--	--	--	--	--	
MW-11	3/31/1995	--	--	--	--	--	
MW-11	6/20/1995	--	--	--	--	--	
MW-11	8/23/1995	--	--	--	--	--	
MW-11	11/16/1995	--	--	--	--	--	
MW-11	1/30/1996	--	--	--	--	--	
MW-11	6/2/1996	--	--	--	--	--	
MW-11	8/26/1996	--	--	--	--	--	
MW-11	10/16/1996	--	--	--	--	--	
MW-11	4/28/1997	--	--	--	--	--	
MW-11	9/10/1997	--	--	--	--	--	
MW-11	4/19/1998	--	--	--	--	--	
MW-11	9/23/1998	**--**	**--**	**--**	**--**	**--**	
MW-11	4/28/1999	**--**	**--**	**--**	**--**	**--**	
MW-11	10/13/1999	**--**	**--**	**--**	**--**	**--**	
MW-11	05/19/2000	**--**	**--**	**--**	**--**	**--**	
MW-11	9/27/2000	--	--	--	--	--	
MW-11	5/5/2001	--	--	--	--	--	
MW-11	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-11	10/2/2001	--	--	--	--	--	
MW-11	5/1/2002	--	--	--	--	--	
MW-11	9/20/2002	--	--	--	--	--	
MW-11	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-11	10/2/2003	--	--	--	--	--	
MW-11	5/1/2004			DESTROYED - MAY 2004			
MW-12	2/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-12	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-12	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-12	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-12	9/21/2001	--	--	--	--	--	
MW-12	5/1/2004			DESTROYED - MAY 2004			
MW-14A	5/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only

Table 4. Historical Groundwater Analytical Results - Additional VOCs
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
Anchorage, Alaska

Well ID	Sample Date	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)	Comments
ADEC Groundwater Cleanup Levels		**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**	
MW-14A	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-14A	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-14A	9/21/2001	--	--	--	--	--	
MW-14A	5/1/2004			DESTROYED - MAY 2004			
MW-14B	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-14B	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-14B	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-14B	9/21/2001	--	--	--	--	--	
MW-14B	5/1/2004			DESTROYED - MAY 2004			
MW-15	9/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-15	11/1/1992	--	--	--	--	--	Sample date accurate to month and year only
MW-15	5/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-15	8/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-15	11/1/1993	--	--	--	--	--	Sample date accurate to month and year only
MW-15	3/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-15	6/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-15	8/1/1994	--	--	--	--	--	Sample date accurate to month and year only
MW-15	12/22/1994	--	--	--	--	--	
MW-15	3/31/1995	--	--	--	--	--	
MW-15	6/20/1995	--	--	--	--	--	
MW-15	8/23/1995	--	--	--	--	--	
MW-15	11/16/1995	--	--	--	--	--	
MW-15	1/30/1996	--	--	--	--	--	
MW-15	6/2/1996	--	--	--	--	--	
MW-15	8/26/1996	--	--	--	--	--	
MW-15	10/16/1996	--	--	--	--	--	
MW-15	4/28/1997	--	--	--	--	--	
MW-15	9/10/1997	--	--	--	--	--	
MW-15	4/19/1998	--	--	--	--	--	
MW-15	9/23/1998	--	--	--	--	--	
MW-15	4/28/1999	--	--	--	--	--	
MW-15	10/13/1999	--	--	--	--	--	
MW-15	5/19/2000	--	--	--	--	--	
MW-15	9/27/2000	--	--	--	--	--	
MW-15	5/5/2001	--	--	--	--	--	
MW-15	10/20/2001	--	--	--	--	--	
MW-15	5/1/2002	--	--	--	--	--	
MW-15	9/20/2002	--	--	--	--	--	
MW-15	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-15	10/2/2003	--	--	--	--	--	
MW-15	6/1/2004	--	--	--	--	--	
MW-15	9/21/2004	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-15	5/12/2005	--	--	--	--	--	
MW-15	9/19/2005	--	--	--	--	--	
MW-15	5/8/2006	--	--	--	--	--	
MW-16	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-16	10/02/2001	--	--	--	--	--	
MW-16	5/1/2002	--	--	--	--	--	
MW-16	9/20/2002	--	--	--	--	--	
MW-16	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-16	10/02/2003	--	--	--	--	--	
MW-16	6/1/2004	--	--	--	--	--	
MW-16	9/21/2004	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-16	5/12/2005	--	--	--	--	--	
MW-16	9/19/2005	--	--	--	--	--	
MW-16	5/8/2006	--	--	--	--	--	
MW-16	9/24/2006	--	--	--	--	--	
MW-16	5/14/2007	--	--	--	--	--	
MW-16	9/12/2007	--	--	--	--	--	
MW-16	5/1/2008	<0.005	**0.0346**	**0.197**	**0.102**	<0.005	
MW-16	5/14/2009			FENCED, CANNOT BE ACCESSED			
MW-17	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-17	10/2/2001	--	--	--	--	--	
MW-17	5/1/2002	--	--	--	--	--	
MW-17	9/20/2002	--	--	--	--	--	
MW-17	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-17	10/2/2003	--	--	--	--	--	
MW-17	6/1/2004	--	--	--	--	--	
MW-17	9/21/2004	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-17	5/12/2005	--	--	--	--	--	
MW-17	9/19/2005	--	--	--	--	--	
MW-17	5/8/2006	--	--	--	--	--	
MW-17	9/24/2006	--	--	--	--	--	
MW-17	5/14/2007	--	--	--	--	--	
MW-17	9/21/2007	--	--	--	--	--	
MW-17	5/1/2008	<0.005	<0.005	<0.005	<0.07	<0.005	
MW-17	5/14/2009			FENCED, CANNOT BE ACCESSED			
MW-18	8/2/2001	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-18	10/02/2001	--	--	--	--	--	
MW-18	5/1/2002	--	--	--	--	--	
MW-18	9/20/2002	**--**	**--**	**--**	**--**	**--**	
MW-18	5/20/2003	**--**	**--**	**--**	**--**	**--**	Sample date defaulted to first date listed in historical data table
MW-18	10/2/2003	**--**	**--**	**--**	**--**	**--**	
MW-18	6/1/2004	**--**	**--**	**--**	**--**	**--**	
MW-18	9/21/2004	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
MW-18	5/12/2005	--	--	--	--	--	
MW-18	9/19/2005	--	--	--	--	--	
MW-18	5/8/2006	--	--	--	--	--	
Trip Blank	1/30/1996	--	--	--	--	--	
Trip Blank	6/2/1996	--	--	--	--	--	
Trip Blank	8/26/1996	--	--	--	--	--	
Trip Blank	10/16/1996	--	--	--	--	--	
Trip Blank	4/28/1997	--	--	--	--	--	
Trip Blank	9/10/1997	--	--	--	--	--	
Trip Blank	4/19/1998	--	--	--	--	--	
Trip Blank	09/23/1998	--	--	--	--	--	
Trip Blank	4/28/1999	--	--	--	--	--	
Trip Blank	10/13/1999	--	--	--	--	--	
Trip Blank	9/27/2000	--	--	--	--	--	
Trip Blank	5/5/2001	--	--	--	--	--	

Table 4. Historical Groundwater Analytical Results - Additional VOCs
First Quarter 1992 to Current
Former Chevron-Branded Service Station 97324
4417 Lake Otis Parkway
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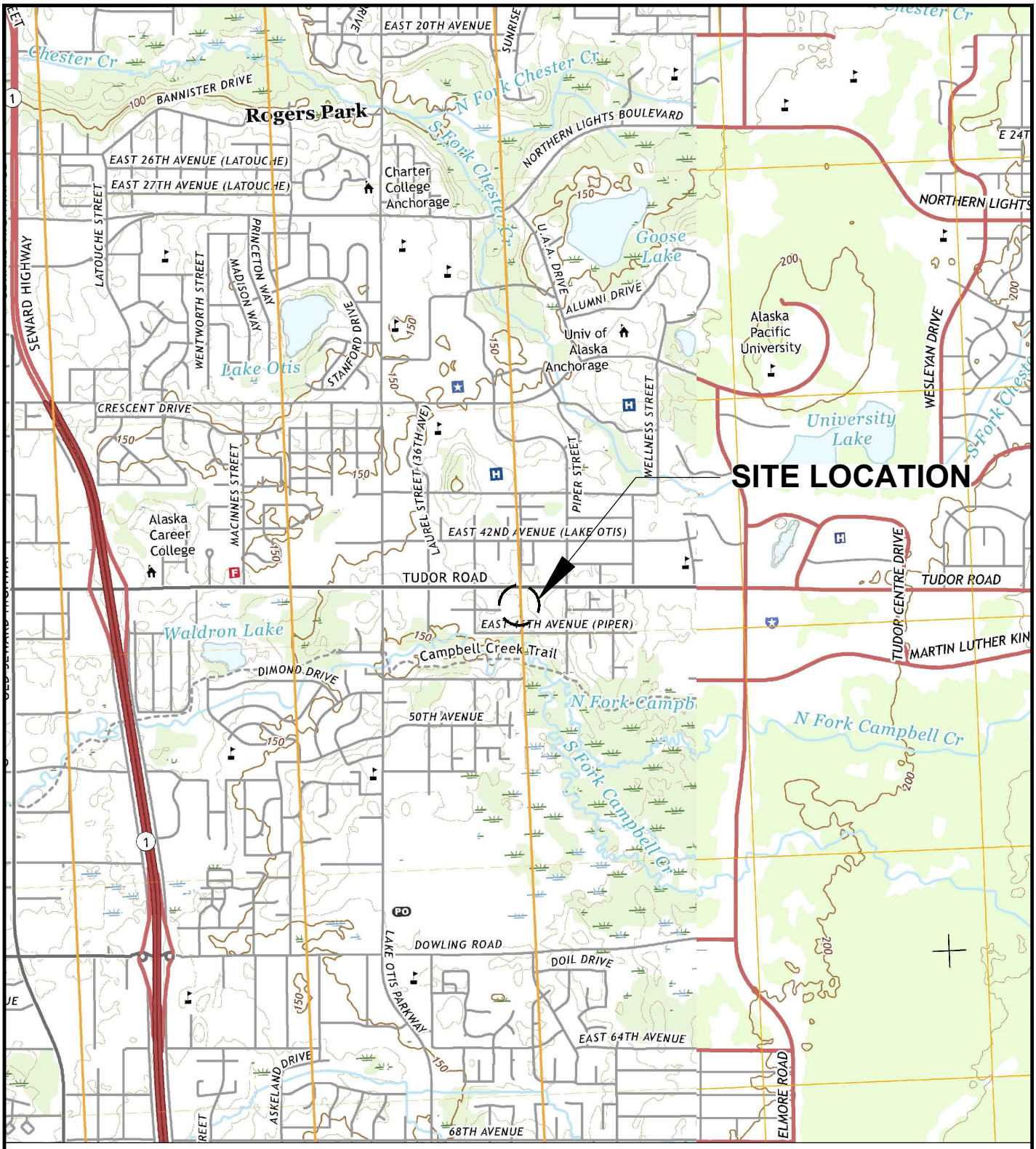
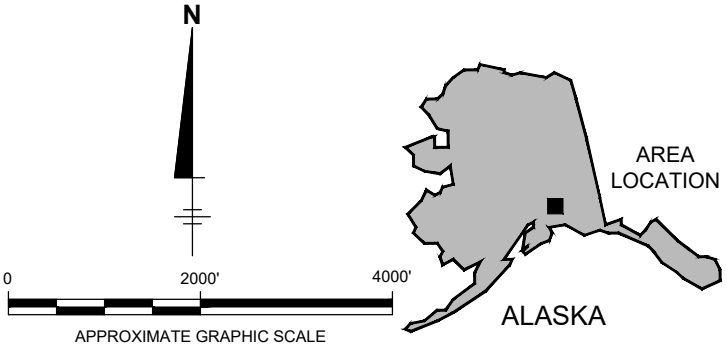
Well ID	Sample Date	EDC (mg/L)	TCE (mg/L)	PCE (mg/L)	cis-1,2-DCE (mg/L)	Methylene chloride (mg/L)	Comments
ADEC Groundwater Cleanup Levels		**0.0017**	**0.0028**	**0.041**	**0.036**	**0.11**	
Trip Blank	10/2/2001	--	--	--	--	--	
Trip Blank	5/1/2002	--	--	--	--	--	
Trip Blank	9/20/2002	--	--	--	--	--	
Trip Blank	5/20/2003	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
Trip Blank	10/2/2003	--	--	--	--	--	
Trip Blank	6/1/2004	--	--	--	--	--	
Trip Blank	9/21/2004	--	--	--	--	--	Sample date defaulted to first date listed in historical data table
Trip Blank	5/12/2005	--	--	--	--	--	
Trip Blank	9/19/2005	--	--	--	--	--	
Trip Blank	5/8/2006	--	--	--	--	--	
Trip Blank	9/24/2006	--	--	--	--	--	
Trip Blank	5/14/2007	--	--	--	--	--	
Trip Blank	9/21/2007	--	--	--	--	--	
Trip Blank	5/1/2008	<0.005	<0.005	<0.005	<0.07	<0.005	
Trip Blank	7/15/2008	<0.005	<0.005	<0.005	<0.07	<0.005	
Trip Blank	4/30/2009	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	8/19/2009	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	4/20/2010	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	6/10/2010	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	8/27/2010	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	5/24/2011	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	7/26/2011	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	11/10/2011	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	6/20/2012	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	11/5/2012	<0.0005	<0.001	<0.0008	<0.0008	<0.002	
Trip Blank	4/30/2013	<0.00037	<0.000083	<0.00013	<0.000085	<0.002	
Trip Blank	11/8/2013	<0.00022	<0.00012	<0.00029	<0.00023	<0.0020	
Trip Blank	4/28/2014	<0.00013	<0.000091	<0.00016	<0.00013	<0.0020	
Trip Blank	11/7/2014	<0.00013	<0.000091	<0.00016	<0.00013	<0.0020	
Trip Blank	4/21/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
Trip Blank	11/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
Trip Blank	5/1/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	
Trip Blank	4/27/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Trip Blank	10/18/2018	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	
Trip Blank	4/3/2019	<0.0003	<0.0002	<0.0002	<0.0002	<0.0003	
Tudor Motel	9/21/2007	<0.005	<0.0001	<0.0001	<0.0001	<0.0005	
Tudor Motel	5/1/2008	<0.005	<0.005	<0.005	<0.07	<0.0005	
Tudor Motel	7/15/2008	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	

Notes:
ID = Identification
MW = Groundwater monitoring well
mg/L = Milligrams per liter
Bold = Value exceeds Value exceeds ADEC Groundwater Cleanup Level
<0.0002 = Not detected at or above the method detection limit (MDL)
[BD] = Blind Duplicate Sample Result
QA (TB) = Quality Assurance (Trip Blank)
ADEC = Alaska Department of Environmental Conservation
Samples analyzed by USEPA SW-846 8260C
EDC = 1,2-Dichloroethane
TCE = Trichloroethylene
PCE = Tetrachloroethylene
Cis-1,2-DCE = Cis 1,2-Dichloroethane
[a] = Levels established in ADEC Groundwater Cleanup Levels (18 AAC 75.345)

FIGURES



SOURCE: USGS 7.5 ANCHORAGE A-8 NW QUADRANGLE, ALASKA.



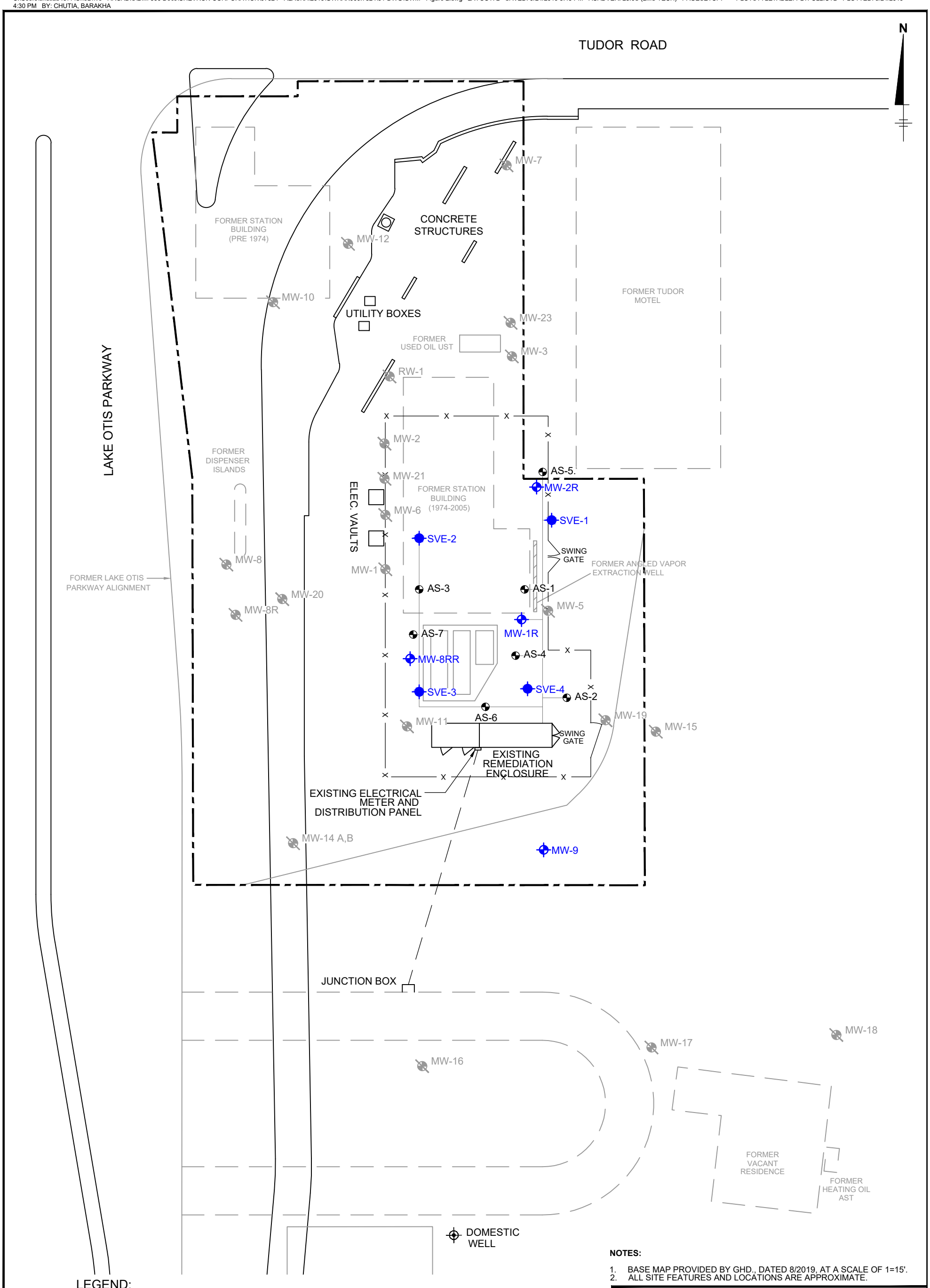
CHEVRON-BRANDED SERVICE STATION 97324
4417 LAKE OTIS PARKWAY
ANCHORAGE, ALASKA

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY:IRVINE DIV/GROUP:ENVCAD DB: E.MURESAN LD: E. MURESAN PIC: M. FLEISCHNER PM: G. FIOL TM: A. CHUA ES: A.PATEL
C:\Users\chutiab4677\OneDrive - ARCADIS\BIM 360 Docs\CHEVRON CORPORATION\97324 - ALASKA\2019\GWRAK000.7324\01-DWG\GWM - Figure 2.dwg LAYOUT: 2 SAVED: 9/24/2019 3:45 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/24/2019 4:30 PM BY: CHUTIA, BARAKHA



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- OFFSITE WELL LOCATION
- DESTROYED WELL
- DOMESTIC WELL

0 50' 100'

APPROXIMATE SCALE: 1" = 50'

NOTES:

1. BASE MAP PROVIDED BY GHD., DATED 8/2019, AT A SCALE OF 1=15'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

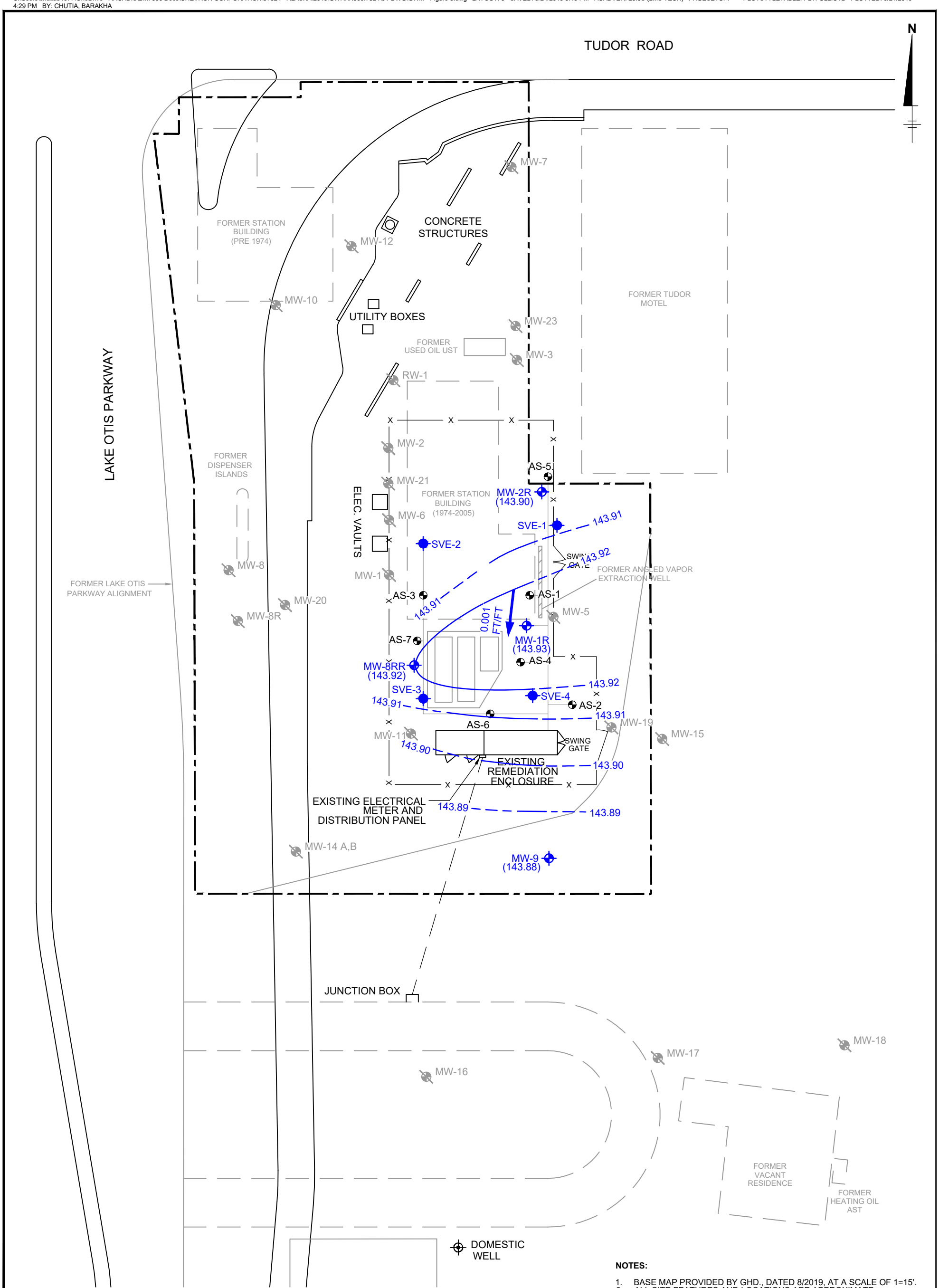
CHEVRON-BRANDED SERVICE STATION 97324
4417 LAKE OTIS PARKWAY
ANCHORAGE, ALASKA

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY:IRVINE DIV/GROUP:ENVCAD DB: E.MURESAN LD: E. MURESAN PIC: M. FLEISCHNER PM: G. FIOL TM: A. CHUA ES: A.PATEL
C:\Users\chutiab4677\OneDrive - ARCADIS\BIM 360 Docs\CHEVRON CORPORATION\97324 - ALASKA\2019\GWRAK000.7324\01-DWG\GWM - Figure 3.dwg LAYOUT: 3 SAVED: 9/24/2019 3:45 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/24/2019 4:29 PM BY: CHUTIA, BARAKHA



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- OFFSITE WELL LOCATION
- DESTROYED WELL
- DOMESTIC WELL
- (143.93) GROUNDWATER ELEVATION IN FEET
- 143.92 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION
- 0.001 FT/FT APPROXIMATE HYDRAULIC GRADIENT (FEET/FOOT)

NOTES:

1. BASE MAP PROVIDED BY GHD., DATED 8/2019, AT A SCALE OF 1=15'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

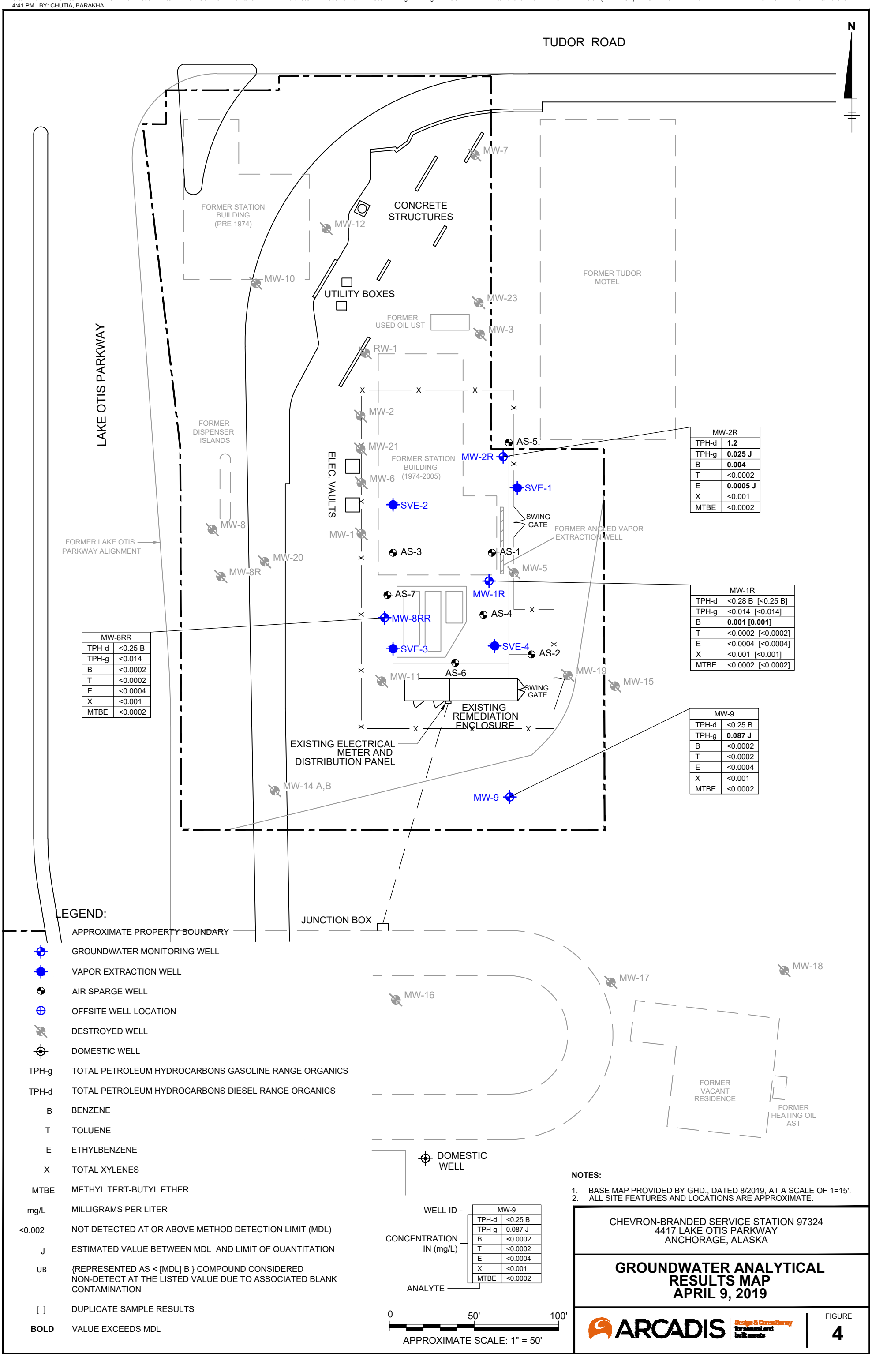
CHEVRON-BRANDED SERVICE STATION 97324
4417 LAKE OTIS PARKWAY
ANCHORAGE, ALASKA

GROUNDWATER ELEVATION CONTOUR MAP JUNE 7, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY:IRVINE DIV/GROUP:ENVCAD DB: E.MURESAN LD: E. MURESAN PIC: M. FLEISCHNER PM: G. FIOL TM: A. CHUA ES: A.PATEL
C:\Users\chutiab4677\OneDrive - ARCADIS\BIM 360 Docs\CHEVRON CORPORATION\97324 - ALASKA\2019\GWRAK000.7324\01-DWG\GWM - Figure 4.dwg LAYOUT: 4 SAVED: 9/24/2019 4:40 PM ACADVER: 23.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/24/2019 4:41 PM BY: CHUTIA, BARAKHA



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- OFFSITE WELL LOCATION
- DESTROYED WELL
- DOMESTIC WELL
- TPH-g — TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE ORGANICS
- TPH-d — TOTAL PETROLEUM HYDROCARBONS DIESEL RANGE ORGANICS
- B — BENZENE
- T — TOLUENE
- E — ETHYLBENZENE
- X — TOTAL XYLENES
- MTBE — METHYL TERT-BUTYL ETHER
- mg/L — MILLIGRAMS PER LITER
- <0.002 — NOT DETECTED AT OR ABOVE METHOD DETECTION LIMIT (MDL)
- J — ESTIMATED VALUE BETWEEN MDL AND LIMIT OF QUANTITATION
- UB — {REPRESENTED AS < [MDL] B } COMPOUND CONSIDERED NON-DETECT AT THE LISTED VALUE DUE TO ASSOCIATED BLANK CONTAMINATION
- [ ] — DUPLICATE SAMPLE RESULTS
- **BOLD** — VALUE EXCEEDS MDL

WELL ID — MW-9

CONCENTRATION IN (mg/L)	
TPH-d	<0.25 B
TPH-g	0.087 J
B	<0.0002
T	<0.0002
E	<0.0004
X	<0.001
MTBE	<0.0002

ANALYTE

0 50' 100'

APPROXIMATE SCALE: 1" = 50'

NOTES:

1. BASE MAP PROVIDED BY GHD., DATED 8/2019, AT A SCALE OF 1=15'.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

CHEVRON-BRANDED SERVICE STATION 97324
4417 LAKE OTIS PARKWAY
ANCHORAGE, ALASKA

GROUNDWATER ANALYTICAL RESULTS MAP APRIL 9, 2019

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FIGURE 4

APPENDIX A

Site Background and History

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Chevron Environmental Management Company

Appendix A:

Site History and Background

Former Chevron Facility 97324
4417 Lake Otis Parkway
Anchorage, Alaska
ADEC File No: 2100.26.008
HAZARD ID No: 23885

October 22, 2019

Appendix A: 97324 Site Description and Background

1 97324 SITE BACKGROUND AND HISTORY

1.1 Site Description and Vicinity

Former Chevron Facility 97324 is located at 4417 Lake Otis Parkway in Anchorage, Alaska. The site was formerly operated as a Chevron-branded service station with three underground storage tanks (UST), two dispenser islands, and a station building with an auto service bay. The surrounding properties are mixed commercial and industrial; the site is bordered to the north, west, and south by former or current ADEC contaminated sites.

1.2 Site History

In 2004, the facility building, three petroleum underground storage tanks (USTs) equipped with dispenser pumps, and product lines were removed from the property. A remediation system consisting of seven air sparge (AS) wells and four soil vapor extraction (SVE) wells was operated seasonally until 2017, when it was shut down.

2 SITE CHARACTERIZATIONS

A soil and groundwater remediation system which included seven air sparge (AS) wells and four soil vapor extraction (SVE) wells was shut down in 2017. Currently, six groundwater monitoring wells remain in place, four of which are sampled and monitored semiannually.

3 CURRENT SITE MONITORING ACTIVITIES

The site currently has a network of six monitoring wells; four wells are monitored and sampled semiannually (MW-1R, MW-2R, MW-8RR, and MW-9). Historically, concentrations of volatile organic compounds (VOCs), gasoline range organics (GRO), and diesel range organics (DRO) have exceeded their respective ADEC Method 2 groundwater cleanup levels in several monitoring wells.

4 GEOLOGY AND HYDROGEOLOGY

4.1 Site Hydrogeology

The site is in south central Alaska, south of the Knik Arm and north of the Turnagain Arm of Cook Inlet. From 1992 until present, static groundwater depths at the site have ranged between 8.58 to 24.53 feet below top of casing (ft btoc). Historic ground water flow is to the northwest.

5 REFERENCES

GHD Inc. 2018. Second Semiannual 2018 Groundwater Monitoring Report Former Chevron-Branded Service Station 97324, 4417 Lake Otis Parkway , Anchorage, AK. December 5

APPENDIX B

Field Data Sheets

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Daily Log

Project Name 97324 Project Number 97324 Page 1 of 1

Site Location 4417 Lake Otis Pkwy Anchorage AK Date 6/7/19

Field Personnel D. Beaubom, E. Wyeth, McLane Surveyors

Time	Description of Activities		
0740	Arrive on site		
	Well ID	DTW	notes
	MW-2R	24.35	
	MW-1R	23.63	
	MW-8RR	22.51	
	MW-9	15.36	
1030	Depart site		

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Daily Log

Project Name Chevron 97324 Project Number 97324 Page 1 of 2

Site Location 4417 Lake Otis Pkwy Anchorage AK Date 4/9/19

Field Personnel David Beaudoin Evan Wojik

Time	Description of Activities
700	Arrive at office, load truck
800	Depart for Fedex to ship 71512 cooler
825	Depart Fedex to Home Depot for supplies (buckets + gray bottles for 2nd set up)
850	Depart Home Depot for ~~Safeway~~ Fred Myer for DI water + ice
910	Depart Fred Myers for site
916	Arrive on site contacted Nicole Monroe for start work approval
	Well gauging notes

Well ID	PID	DTW	DTP	TD	notes
MW-1R	0.0	23.94	NA	31.1	missing bolt
MW-2R	0.0	24.64	NA	31.5	No lock
MW-8RR	0.0	22.83	NA	32.70	no lock
MW-9	0.0	15.65	NA	19.30	well vault sound

1130	Perform equipment blank
1150	Set up on MW-1R for sampling for DRO, GRO, VOC's and collected blind dup.
1230	Clean up and decon, move to next ~~site~~ well
1300	Set up on MW-8RR for sampling for DRO, GRO, VOC's and MSD collected
1345	Clean up and decon equipment, move to next well
1420	Set up on MW-2R for sampling for DRO, GRO, VOC's, and PAH's
1450	Clean up and decon equipment, load up vehicle
1500	Depart site for office to get more sample bottles to complete groundwater sampling event
1515	Arrive at office, gather materials, depart back to site
1540	Arrive on site to finish sampling with MW-9
~~1615~~	~~Clean up~~

1550	Set up on MW-9 for sampling of DRO, GRO and VOC's
1600	Start sampling MW-9
1620	Clean up and decon equipment
1630	Get close work approval from Nicole Monroe
1635	Depart site back to office

GROUNDWATER SAMPLING FORM

ARCADIS

Project No. Chevron 97324 | Well ID MW-1R | Date 4/9/19

Project Name/Location 4417 Lake Otis Pkwy Anchorage, AK | Weather sunny

Measuring Pt. Description Top of Casing | Screen Setting (ft-bmp) unknown no well logs | Casing Diameter (in.) 2" | Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) ~~24.8~~ 23.94 | Total Depth (ft-bmp) 31.1 | Water Column (ft) 7.16 | Gallons in Well 1.15

MP Elevation ___ | Pump Intake (ft-bmp) ~25.5 | Purge Method: Low Flow; Centrifugal; Submersible; Other Bladder | Sample Method Low Flow

Pump On/Off ~~1114~~ 1214/1239 | Volumes Purged ~1/2 vol

Sample Time: Label 1235 | Gallons Purged 0.56

Purge Start 1218

Purge End 1224

Replicate/ Code No. BD-1-W-190409 | Sampled by DGB

Time	Minutes Elapsed	Rate (gpm)/(mL/min) 200mL/min +	Depth to Water (ft) -0.3	Gallons Purged	pH ± 0.1	Cond. (µMhos)/(mS/cm) ± 3%	Turbidity (NTU) ± 10%	DO (mg/L) ± 10%	Temp. (°C)/(°F) ± 3%	Redox (mV) ± 10mV	Appearance Color	Appearance Odor
1214		300	23.98	0.32	7.36	496.7	1276.1	5.53	5.7	77.3	cloudy	—
1221	3	300	23.95	0.40	7.24	496.0	1254	4.43	5.6	81.2	cloudy	—
1224	6	300	23.98	0.48	7.20	491.9	1449.8	4.27	5.6	84.1	cloudy	—
1227	9	300	23.98	0.56	7.13	491.4	1071.1	3.54	5.6	86.7	cloudy	—
Stabilization Calculations (±)					0.08 ✓	<3%			<3%	<10	—	—
					0.04 ✓	<3%			<3%	<10	—	—
					0.07 ✓	<3%			<3%	<10	—	—
Stabilization Criteria					± 0.1 s.u.	±3%	± 10% or within 1 NTU (1)	± 10%	±3%	±10 mV	—	—

(1) Turbidity < 50 NTU and ±10% or within 1 NTU of a previous reading when <10 NTU

Constituents Sampled	Container	Number	Preservative
VOC US EPA 8260	40 ml VOAs	3	HCl
GRO AK101	40 ml VOAs	3	HCl
DRO AK102	250 ml Amber Glass	2	HCl
Same Bottles & Analysis for BD-1			

Comments Sample ID MW-1R-W-190409

BD-W-190409 collected from MW-1R

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: w/in System Fencing

Condition of Well: Vault is missin Bolts

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: 3910

GROUNDWATER SAMPLING FORM

ARCADIS

Project No. Chevron 97324 | Well ID MW-8RR | Date 4/9/19

Project Name/Location 4417 Lake Otis Pkwy Anchorage, AK | Weather Sunny

Measuring Pt. Description Top of Casing | Screen Setting (ft-bmp) unknown no-well logs | Casing Diameter (in.) 2 | Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) 22.84 | Total Depth (ft-bmp) 32.70 | Water Column (ft) 9.86 | Gallons in Well ~1.6

MP Elevation Top of Casing | Pump Intake (ft-bmp) ~24.5 | Purge Method: Low Flow; Centrifugal; Submersible; Other Bladder pump | Sample Method Low flow

Pump On/Off 1305/1329 | Volumes Purged ~1 1/2 vol.

Sample Time: Label 1325 | Gallons Purged ~0.80

Purge Start 1312

Purge End 1321

Replicate/ Code No. ___

Sampled by DGB

Time	Minutes Elapsed	Rate (gpm)/(mL/min) 200mL/min +	Depth to Water (ft) -0.3	Gallons Purged	pH ± 0.1	Cond. (µMhos)/(mS/cm) ± 3%	Turbidity (NTU) ± 10%	DO (mg/L) ± 10%	Temp. (°C)/(°F) ± 3%	Redox (mV) ± 10mV	Appearance Color	Appearance Odor
1312		300	22.90	0.56	7.35	820	402.4	2.55	5.8	106.2	milky	—
1315	3	300	22.92	0.64	7.28	806	333.5	3.24	5.9	106.9	milky	—
1318	6	300	22.95	0.72	7.23	796	366.7	3.75	5.8	107.5	milky	—
1321	9	300	22.95	0.80	7.21	786	278.6	3.69	5.7	108.3	milky	—
Stabilization Calculations (±)					0.07	<3%	/	/	<3%	<10	—	—
					0.05	<3%			<3%	<10	—	—
					0.02	<3%			<3%	<10	—	—
Stabilization Criteria					±0.1 s.u.	±3%	± 10% or within 1 NTU (1)	± 10%	±3%	±10 mV	—	—

(1) Turbidity < 50 NTU and ±10% or within 1 NTU of a previous reading when <10 NTU

Constituents Sampled	Container	Number	Preservative
VOCs US EPA 8260	40 ml Amber VOAs	3	HCl
GRO AK 101	40 ml Amber VOAs	3	HCl
DRO AK 102	250 ml Amber Glass	2	HCl
MW-8RR-MS/MSD-W-190409	collected Also	(Same analytes	

Comments Sample ID: MW-8RR-W-190409

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: West side of site/within system fence

Condition of Well: ___

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: ___

GROUNDWATER SAMPLING FORM

ARCADIS

Page 1 of 1

Project No. Chevron 97324 | Well ID MW-2R | Date 4/9/19

Project Name/Location 4417 Lake Otis Pkwy Anchorage, AK | Weather sunny

Measuring Pt. Description Top of Casing | Screen Setting (ft-bmp) unknown no well logs | Casing Diameter (in.) 2" | Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) 24.64 | Total Depth (ft-bmp) 31.5 | Water Column (ft) 6.86 | Gallons in Well n/a

MP Elevation Top of Casing | Pump Intake (ft-bmp) ~26 | Purge Method: Low Flow ___ Centrifugal ___ Submersible ___ Other Bladder | Sample Method Low Flow

Pump On/Off 1407/1425 | Volumes Purged <1/2 vol.

Sample Time: Label 1470 | Gallons Purged ~0.5

Purge Start 1410

Purge End 1420

Replicate/ Code No. ___

Sampled by DGB

Time	Minutes Elapsed	Rate (gpm)/(mL/min) 200mL/min +	Depth to Water (ft) -0.3	Gallons Purged	pH ± 0.1	Cond. (µMhos)/(mS/cm) ± 3%	Turbidity (NTU) ± 10%	DO (mg/L) ± 10%	Temp. (°C)/(°F) ± 3%	Redox (mV) ± 10mV	Appearance Color	Appearance Odor
1410		300	24.65	0.24	7.42	814	81.4	2.12	5.9	129.4	clear	—
1413	3	300	24.64	0.32	7.35	812	93.2	1.72	5.9	129.9	clear	—
1416	6	300	24.63	0.40	7.21	811	60.4	1.62	5.8	129.9	clear	—
1419	9	300	24.64	0.40	7.17	809	38.3	1.59	5.8	129.7	clear	—
Stabilization Calculations (±)					<0.1	<3%			<3%	<10	—	—
					✓	<3%			<3%	<10	—	—
					<0.1	<3%			<3%	<10	—	—
Stabilization Criteria					±0.1 s.u.	±3%	± 10% or within 1 NTU (1)	± 10%	±3%	±10 mV	—	—

(1) Turbidity < 50 NTU and ±10% or within 1 NTU of a previous reading when <10 NTU

Constituents Sampled	Container	Number	Preservative
VOC US EPA 8260	40 ml Amber VOA	3	HCl
GRO AK 101	40 ml Amber VOA	3	HCl
DRO AK 102	250 ML Amber Glass	2	HCl
PAH 8270	1 Liter Amber Glass	1	None

Comments ___

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: No Lock within System Fence

Condition of Well: ✓

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: ___

GROUNDWATER SAMPLING FORM

ARCADIS

Project No. Chevron 97324 | Well ID MW-9 | Date 4/9/19

Project Name/Location 4417 Lake Otis Pkwy Anchorage, AK | Weather Sunny

Measuring Pt. Description Top of casing | Screen Setting (ft-bmp) unknown | Casing Diameter (in.) 2" | Well Material ✓PVC ___SS

Static Water Level (ft-bmp) 15.65 | Total Depth (ft-bmp) 19.30 | Water Column (ft) ___ | Gallons in Well ___

MP Elevation Top of Casing | Pump Intake (ft-bmp) ___ | Purge Method: Low Flow ✓ Centrifugal ___ Submersible ___ Other Bladder Pump | Sample Method Low Flow

Pump On/Off 1547/1610 | Volumes Purged ___

Sample Time: Label 1600 | Gallons Purged ___

Purge Start 1550

Purge End 1559

Replicate/ Code No. ___

Sampled by DGB

Time	Minutes Elapsed	Rate (gpm)/(mL/min) 200mL/min +	Depth to Water (ft) -0.3	Gallons Purged	pH ± 0.1	Cond. (µMhos)/(mS/cm) ± 3%	Turbidity (NTU) ± 10%	DO (mg/L) ± 10%	Temp. (°C)/(°F) ± 3%	Redox (mV) ± 10mV	Appearance Color	Appearance Odor
1550		300	15.65		7.89	309.1	109.6	4.79	5.3	104.4	cloudy	—
1553	3	300	15.66		7.46	310.8	76.3	3.38	5.1	111.3	clear	—
1556	6	300	15.67		6.85	312.4	38.3	1.75	5.1	119.5	clear	—
1559	9	300	15.66		6.72	313.0	34.1	1.94	5.1	121.7	clear	—
Stabilization Calculations (±)						<3%			<3%	<10	—	—
						<3%			<3%	<10	—	—
						<3%			<3%	<10	—	—
Stabilization Criteria					± 0.1 s.u.	±3%	± 10% or within 1 NTU (1)	± 10%	±3%	±10 mV	—	—

(1) Turbidity < 50 NTU and ±10% or within 1 NTU of a previous reading when <10 NTU

Constituents Sampled	Container	Number	Preservative
DRO AK 102	250 mL Amber glass	2	HCl
GRO AK 101	40 mL Amber VOA	3	HCl
VOC's 8260	40mL Amber VOA	3	HCl

Comments Sample ID MW-9-W-190409

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: SE of remediation sys.

Condition of Well: good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well: 3410

Chevron Generic Analysis Request/Chain of Custody

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Acct. # _____ For Eurofins Lancaster Laboratories Environmental use only Group # _____ Sample # _____

Client Information

Facility # 97324 WBS 02.09 - Groundwater Sampling/Monitoring

Site Address 4417 Lake Otis Parkway, Anchorage, AK

Chevron PM: Eric Hetrick Lead Consultant: Arcadis

Consultant/Office:

Consultant Project Mgr: Nicole Monroe

Sampler: David G Beaudoin

State where samples were collected: Alaska For Compliance: Yes ☒ No ☐

SCR #: _____

Preservation Codes

H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
F = Field Filtered O = Other

☐ Results in Dry Weight

☐ J value reporting needed

☐ Must meet lowest detection limits possible for 8260 compounds

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Matrix: Soil	Sediment	Water	Ground	Potable	NPDES	Surface	Oil	Air	Total Number of Containers	Analyses Requested: BTEX + MTBE 8021	8260 full scan VOCs	Oxygenates	TPH-GRO AK101	8260	8015	TPH-DRO without Silica Gel Cleanup AK102	TPH-DRO with Silica Gel Cleanup	VPH	EPH	Method	Lead Total	Diss.	Method	PAH US EPA 8270	Naphth	8260
EQB-1-W-190409	04.09.19		/				DGB							8		/		/			/									
MW-1R-W-190409	04.09.19		/				✓							8		/		/			/									
MW-8RR-MS/MSD-W-190409	04.09.19		/				✓							8		/		/			/									
MW-8RR-W-190409	04.09.19		/				✓							8		/		/			/									
MW-2R-W-190409	04.09.19		/				✓							9		/		/			/								/	
MW-9-W-190409	04.09.19		/				✓							8		/		/			/									
BD-1-W-190409	04.09.19	—	/				✓							8		/		/			/									

Turnaround Time Requested (TAT) (please circle)

Standard 5 day 4 day
72 hour 48 hour 24 hour

Relinquished by	Date	Time	Received by	Date	Time
	04.09.19	17:00	Arcadis Cld Storage		
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time

Data Package (circle if required)

Type I - Full Type III Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default) Other: _____

Relinquished by Commercial Carrier: UPS ____ FedEx ✓ Other ____

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

Chevron Generic Analysis Request/Chain of Custody

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Acct. # _____ For Eurofins Lancaster Laboratories Environmental use only Group # _____ Sample # _____

Client Information

Facility # 97324 WBS 0209 - Groundwater Sampling/Monitoring

Site Address 4417 Lake Otis Parkway, Anchorage, AK

Chevron PM: Eric Hetrick

Lead Consultant: Arcadis

Consultant/Office:

Consultant Project Mgr: Nicole Monroe

Sampler: David G. Beaudoin

State where samples were collected: Alaska

For Compliance: Yes ☒ No ☐

SCR #: _____

Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Oil ☐ Air ☐

Analyses Requested

Preservation and Filtration Codes

Preservation Codes

H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
F = Field Filtered O = Other

☐ Results in Dry Weight

☐ J value reporting needed

☐ Must meet lowest detection limits possible for 8260 compounds

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☐ Naphth ☐	8260 full scan VOCs	Oxygenates	TPH-GRO 8260 ☐ AK101 ☐	TPH-DRO without Silica Gel Cleanup AK102 ☐	TPH-DRO with Silica Gel Cleanup ☐	VPH ☐ Method	EPH ☐ Method	Lead Total ☐ Diss. ☐	PAH US EPA 8270
EQB-1-W-190409	04.09.19	1125	/		8		/		/	/					
MW-1R-W-190409	04.09.19	1235	/		8		/		/	/					
MW-8RR-MS/MSD-W-190409	04.09.19	1325	/		8		/		/	/					
MW-8RR-W-190409	04.09.19	1325	/		8		/		/	/					
MW-2R-W-190409	04.09.19	1420	/		9		/		/	/					/
MW-9-W-190409	04.09.19	1600	/		8		/		/	/					
DUP-1-W-190409	04.09.19	—	/		8		/		/	/					
Trip Blank	04.03.19				4		/								

Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Data Package (circle if required)

Type I - Full | Type III | Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default) | Other: _____

Relinquished by	Date	Time	Received by	Date	Time
	04.09.19	17:00	Arcadis Cld Storage		
	04.10.19	0735			
Relinquished by Commercial Carrier: UPS ____ FedEx ✓ Other ____					
Temperature Upon Receipt _____ °C			Custody Seals Intact? Yes No		

APPENDIX C

Laboratory Analytical Results

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

Report Date: May 09, 2019 11:02

Project: 97324

Account #: 11964
Group Number: 2038590
SDG: LSV39
PO Number: 0015308766
Release Number: HETRICK
State of Sample Origin: AK

Electronic Copy To	Arcadis	Attn: Melissa Blanchette
Electronic Copy To	Arcadis	Attn: Arti Patel
Electronic Copy To	Arcadis	Attn: Nicole Monroe

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QA-O-190409 Grab Water	04/09/2019 11:25	1032091
MW-1R-W-190409 Grab Groundwater	04/09/2019 12:35	1032092
MW-8RR-W-190409 Grab Groundwater	04/09/2019 13:25	1032093
MW-8RR-W-190409MS Grab Groundwater	04/09/2019 13:25	1032094
MW-8RR-W-190409MSD Grab Groundwater	04/09/2019 13:25	1032095
MW-2R-W-190409 Grab Groundwater	04/09/2019 14:20	1032096
MW-9 -W-190409 Grab Groundwater	04/09/2019 16:00	1032097
BD-1-WD-190409 Grab Groundwater	04/09/2019	1032098
QA-T-190403 Water	04/03/2019	1032099

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: **QA-O-190409 Grab Water**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 11:25
SDG#: LSV39-01EB

Chevron
ELLE Sample #: GW 1032091
ELLE Group #: 2038590
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	3 J	0.7	20	1
11997	Benzene	71-43-2	N.D.	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	1 J	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	0.3 J	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **QA-O-190409 Grab Water**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Chevron
ELLE Sample #: GW 1032091
ELLE Group #: 2038590
Matrix: Water

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 11:25
SDG#: LSV39-01EB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	0.067 J	0.050	0.25	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191091AA	04/19/2019 23:06	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191091AA	04/19/2019 23:05	Patrick T Herres	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 05:19	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 05:18	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 18:47	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-1R-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 12:35
SDG#: LSV39-02

Chevron
ELLE Sample #: GW 1032092
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	N.D.	0.7	20	1
11997	Benzene	71-43-2	1	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	N.D.	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	N.D.	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	1	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-1R-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 12:35
SDG#: LSV39-02

Chevron
ELLE Sample #: GW 1032092
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	0.21 J	0.056	0.28	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191091AA	04/20/2019 06:15	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191091AA	04/20/2019 06:14	Patrick T Herres	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 05:41	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 05:40	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 19:14	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8RR-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 13:25
SDG#: LSV39-03BKG

Chevron
ELLE Sample #: GW 1032093
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	N.D.	0.7	20	1
11997	Benzene	71-43-2	N.D.	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	N.D.	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	N.D.	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	1	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	3	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8RR-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 13:25
SDG#: LSV39-03BKG

Chevron
ELLE Sample #: GW 1032093
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	0.18 J	0.051	0.25	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 10:51	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 10:50	Corie Mellinger	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 06:03	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 06:02	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 19:42	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8RR-W-190409MS Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 13:25
SDG#: LSV39-03MS

Chevron
ELLE Sample #: GW 1032094
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	140	0.7	20	1
11997	Benzene	71-43-2	22	0.2	1	1
11997	Bromodichloromethane	75-27-4	22	0.2	1	1
11997	Bromoform	75-25-2	20	0.2	4	1
11997	Bromomethane	74-83-9	17	0.3	1	1
11997	2-Butanone	78-93-3	130	0.3	10	1
11997	Carbon Disulfide	75-15-0	20	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	25	0.2	1	1
11997	Chlorobenzene	108-90-7	24	0.2	1	1
11997	Chloroethane	75-00-3	16	0.2	1	1
11997	Chloroform	67-66-3	23	0.2	1	1
11997	Chloromethane	74-87-3	17	0.2	1	1
11997	Cyclohexane	110-82-7	25	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	21	0.3	5	1
11997	Dibromochloromethane	124-48-1	23	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	22	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	23	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	23	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	23	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	25	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	22	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	25	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	24	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	25	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	22	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	22	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	20	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	21	0.2	1	1
11997	Ethylbenzene	100-41-4	24	0.4	1	1
11997	Freon 113	76-13-1	28	0.2	10	1
11997	2-Hexanone	591-78-6	93	0.3	10	1
11997	Isopropylbenzene	98-82-8	24	0.2	5	1
11997	Methyl Acetate	79-20-9	18	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	27	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	87	0.5	10	1
11997	Methylcyclohexane	108-87-2	25	0.2	5	1
11997	Methylene Chloride	75-09-2	21	0.3	1	1
11997	Styrene	100-42-5	23	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	22	0.2	1	1
11997	Tetrachloroethene	127-18-4	28	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8RR-W-190409MS Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 13:25
SDG#: LSV39-03MS

Chevron
ELLE Sample #: GW 1032094
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	24	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	19	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	25	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	24	0.2	1	1
11997	Trichloroethene	79-01-6	23	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	22	0.2	1	1
11997	Vinyl Chloride	75-01-4	19	0.2	1	1
11997	Xylene (Total)	1330-20-7	72	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	1.4	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	3.6	0.053	0.26	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 11:15	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 11:14	Corie Mellinger	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 06:26	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 06:25	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 20:10	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8RR-W-190409MSD Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 13:25
SDG#: LSV39-03MSD

Chevron
ELLE Sample #: GW 1032095
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	130	0.7	20	1
11997	Benzene	71-43-2	22	0.2	1	1
11997	Bromodichloromethane	75-27-4	21	0.2	1	1
11997	Bromoform	75-25-2	20	0.2	4	1
11997	Bromomethane	74-83-9	16	0.3	1	1
11997	2-Butanone	78-93-3	130	0.3	10	1
11997	Carbon Disulfide	75-15-0	20	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	24	0.2	1	1
11997	Chlorobenzene	108-90-7	24	0.2	1	1
11997	Chloroethane	75-00-3	16	0.2	1	1
11997	Chloroform	67-66-3	23	0.2	1	1
11997	Chloromethane	74-87-3	17	0.2	1	1
11997	Cyclohexane	110-82-7	24	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	21	0.3	5	1
11997	Dibromochloromethane	124-48-1	23	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	22	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	23	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	23	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	23	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	25	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	22	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	25	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	24	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	25	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	22	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	22	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	21	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	21	0.2	1	1
11997	Ethylbenzene	100-41-4	24	0.4	1	1
11997	Freon 113	76-13-1	27	0.2	10	1
11997	2-Hexanone	591-78-6	95	0.3	10	1
11997	Isopropylbenzene	98-82-8	24	0.2	5	1
11997	Methyl Acetate	79-20-9	18	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	26	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	88	0.5	10	1
11997	Methylcyclohexane	108-87-2	25	0.2	5	1
11997	Methylene Chloride	75-09-2	21	0.3	1	1
11997	Styrene	100-42-5	23	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	22	0.2	1	1
11997	Tetrachloroethene	127-18-4	29	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-8RR-W-190409MSD Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 13:25
SDG#: LSV39-03MSD

Chevron
ELLE Sample #: GW 1032095
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	24	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	20	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	24	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	24	0.2	1	1
11997	Trichloroethene	79-01-6	22	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	22	0.2	1	1
11997	Vinyl Chloride	75-01-4	19	0.2	1	1
11997	Xylene (Total)	1330-20-7	72	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	1.4	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	3.6	0.053	0.27	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 11:39	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 11:38	Corie Mellinger	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 06:48	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 06:47	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 20:38	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-2R-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 14:20
SDG#: LSV39-04

Chevron
ELLE Sample #: GW 1032096
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	0.9 J	0.7	20	1
11997	Benzene	71-43-2	4	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	N.D.	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	N.D.	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	5	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	0.5 J	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	0.4 J	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-2R-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 14:20
SDG#: LSV39-04

Chevron
ELLE Sample #: GW 1032096
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	
13624	Acenaphthene	83-32-9	N.D.	0.1	0.5	1
13624	Acenaphthylene	208-96-8	N.D.	0.1	0.5	1
13624	Anthracene	120-12-7	N.D.	0.1	0.5	1
13624	Benzo(a)anthracene	56-55-3	N.D.	0.1	0.5	1
13624	Benzo(a)pyrene	50-32-8	N.D.	0.1	0.5	1
13624	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	0.5	1
13624	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	0.5	1
13624	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	0.5	1
13624	Chrysene	218-01-9	0.1 J	0.1	0.5	1
13624	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	0.5	1
13624	Fluoranthene	206-44-0	0.1 J	0.1	0.5	1
13624	Fluorene	86-73-7	N.D.	0.1	0.5	1
13624	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	0.5	1
13624	Naphthalene	91-20-3	0.2 J	0.1	0.5	1
13624	Phenanthrene	85-01-8	N.D.	0.1	0.5	1
13624	Pyrene	129-00-0	0.1 J	0.1	0.5	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	0.025 J	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	1.2	0.053	0.26	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

*=This limit was used in the evaluation of the final result

Sample Description: **MW-2R-W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 14:20
SDG#: LSV39-04

Chevron
ELLE Sample #: GW 1032096
ELLE Group #: 2038590
Matrix: Groundwater

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 12:03	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 12:02	Corie Mellinger	1
13624	16 PAHs 8270D	SW-846 8270D	1	19106WAF026	04/17/2019 12:17	Edward C Monborne	1
00813	BNA Water Extraction	SW-846 3510C	1	19106WAF026	04/16/2019 17:30	Christine E Gleim	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 07:10	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 07:09	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 21:07	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-9 -W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 16:00
SDG#: LSV39-05

Chevron
ELLE Sample #: GW 1032097
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	N.D.	0.7	20	1
11997	Benzene	71-43-2	N.D.	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	N.D.	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	N.D.	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	67	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	0.3 J	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	85	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-9 -W-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019 16:00
SDG#: LSV39-05

Chevron
ELLE Sample #: GW 1032097
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	23	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	0.087 J	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	0.076 J	0.051	0.25	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 12:27	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 12:26	Corie Mellinger	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 07:32	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 07:31	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 21:35	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **BD-1-WD-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019
SDG#: LSV39-06FD

Chevron
ELLE Sample #: GW 1032098
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	N.D.	0.7	20	1
11997	Benzene	71-43-2	1	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	N.D.	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	N.D.	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	1	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	0.4 J	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **BD-1-WD-190409 Grab Groundwater**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/09/2019
SDG#: LSV39-06FD

Chevron
ELLE Sample #: GW 1032098
ELLE Group #: 2038590
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.014	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	0.15 J	0.051	0.25	1

Target analytes were detected in the method blank associated with the samples as noted on the QC summary.
The observed sample pattern in the method blank is not typical of #2 fuel/diesel. The reported result in the method blank is due to an individual peak(s) eluting in the DRO range.

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 12:50	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 12:49	Corie Mellinger	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 07:55	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 07:54	Marie D Beamenderfer	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	191070026A	04/23/2019 22:03	Nicholas R Rossi	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	1	191070026A	04/18/2019 02:30	Mathias Okpo	1

*=This limit was used in the evaluation of the final result

Sample Description: **QA-T-190403 Water**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/03/2019
SDG#: LSV39-07TB

Chevron
ELLE Sample #: GW 1032099
ELLE Group #: 2038590
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Acetone	67-64-1	N.D.	0.7	20	1
11997	Benzene	71-43-2	N.D.	0.2	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1	1
11997	Bromoform	75-25-2	N.D.	0.2	4	1
11997	Bromomethane	74-83-9	N.D.	0.3	1	1
11997	2-Butanone	78-93-3	N.D.	0.3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	0.2	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1	1
11997	Chloroethane	75-00-3	N.D.	0.2	1	1
11997	Chloroform	67-66-3	N.D.	0.2	1	1
11997	Chloromethane	74-87-3	N.D.	0.2	1	1
11997	Cyclohexane	110-82-7	N.D.	0.2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.3	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.2	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.2	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.2	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.2	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1	1
11997	Freon 113	76-13-1	N.D.	0.2	10	1
11997	2-Hexanone	591-78-6	N.D.	0.3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	0.2	5	1
11997	Methyl Acetate	79-20-9	N.D.	0.2	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	0.5	10	1
11997	Methylcyclohexane	108-87-2	N.D.	0.2	5	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1	1
11997	Styrene	100-42-5	N.D.	0.2	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **QA-T-190403 Water**
Facility# 97324
4417 Lake Otis Parkway - Anchorage, AK

Project Name: **97324**

Submittal Date/Time: 04/11/2019 10:10
Collection Date/Time: 04/03/2019
SDG#: LSV39-07TB

Chevron
ELLE Sample #: GW 1032099
ELLE Group #: 2038590
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Toluene	108-88-3	N.D.	0.2	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1	1
11997	Xylene (Total)	1330-20-7	N.D.	1	5	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.014	0.10	1

Sample Comments

State of Alaska Lab Certification No. UST-061

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C/D	SW-846 8260C	1	W191101AA	04/20/2019 09:40	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	W191101AA	04/20/2019 09:39	Corie Mellinger	1
01438	TPH-GRO AK water C6-C10	AK 101	1	19107B20A	04/18/2019 04:57	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030C	1	19107B20A	04/18/2019 04:56	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

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Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: W191091AA	Sample number(s): 1032091-1032092		
Acetone	N.D.	0.7	20
Benzene	N.D.	0.2	1
Bromodichloromethane	N.D.	0.2	1
Bromoform	N.D.	0.2	4
Bromomethane	N.D.	0.3	1
2-Butanone	N.D.	0.3	10
Carbon Disulfide	N.D.	0.2	5
Carbon Tetrachloride	N.D.	0.2	1
Chlorobenzene	N.D.	0.2	1
Chloroethane	N.D.	0.2	1
Chloroform	N.D.	0.2	1
Chloromethane	N.D.	0.2	1
Cyclohexane	N.D.	0.2	5
1,2-Dibromo-3-chloropropane	N.D.	0.3	5
Dibromochloromethane	N.D.	0.2	1
1,2-Dibromoethane	N.D.	0.2	1
1,2-Dichlorobenzene	N.D.	0.2	5
1,3-Dichlorobenzene	N.D.	0.2	5
1,4-Dichlorobenzene	N.D.	0.2	5
Dichlorodifluoromethane	N.D.	0.2	1
1,1-Dichloroethane	N.D.	0.2	1
1,2-Dichloroethane	N.D.	0.3	1
1,1-Dichloroethene	N.D.	0.2	1
cis-1,2-Dichloroethene	N.D.	0.2	1
trans-1,2-Dichloroethene	N.D.	0.2	1
1,2-Dichloropropane	N.D.	0.2	1
cis-1,3-Dichloropropene	N.D.	0.2	1
trans-1,3-Dichloropropene	N.D.	0.2	1
Ethylbenzene	N.D.	0.4	1
Freon 113	N.D.	0.2	10
2-Hexanone	N.D.	0.3	10
Isopropylbenzene	N.D.	0.2	5
Methyl Acetate	N.D.	0.2	5
Methyl Tertiary Butyl Ether	N.D.	0.2	1
4-Methyl-2-pentanone	N.D.	0.5	10
Methylcyclohexane	N.D.	0.2	5
Methylene Chloride	N.D.	0.3	1
Styrene	N.D.	0.2	5
1,1,2,2-Tetrachloroethane	N.D.	0.2	1

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Tetrachloroethene	N.D.	0.2	1
Toluene	N.D.	0.2	1
1,2,4-Trichlorobenzene	N.D.	0.3	5
1,1,1-Trichloroethane	N.D.	0.3	1
1,1,2-Trichloroethane	N.D.	0.2	1
Trichloroethene	N.D.	0.2	1
Trichlorofluoromethane	N.D.	0.2	1
Vinyl Chloride	N.D.	0.2	1
Xylene (Total)	N.D.	1	5
Batch number: W191101AA	Sample number(s): 1032093-1032099		
Acetone	N.D.	0.7	20
Benzene	N.D.	0.2	1
Bromodichloromethane	N.D.	0.2	1
Bromoform	N.D.	0.2	4
Bromomethane	N.D.	0.3	1
2-Butanone	N.D.	0.3	10
Carbon Disulfide	N.D.	0.2	5
Carbon Tetrachloride	N.D.	0.2	1
Chlorobenzene	N.D.	0.2	1
Chloroethane	N.D.	0.2	1
Chloroform	N.D.	0.2	1
Chloromethane	N.D.	0.2	1
Cyclohexane	N.D.	0.2	5
1,2-Dibromo-3-chloropropane	N.D.	0.3	5
Dibromochloromethane	N.D.	0.2	1
1,2-Dibromoethane	N.D.	0.2	1
1,2-Dichlorobenzene	N.D.	0.2	5
1,3-Dichlorobenzene	N.D.	0.2	5
1,4-Dichlorobenzene	N.D.	0.2	5
Dichlorodifluoromethane	N.D.	0.2	1
1,1-Dichloroethane	N.D.	0.2	1
1,2-Dichloroethane	N.D.	0.3	1
1,1-Dichloroethene	N.D.	0.2	1
cis-1,2-Dichloroethene	N.D.	0.2	1
trans-1,2-Dichloroethene	N.D.	0.2	1
1,2-Dichloropropane	N.D.	0.2	1
cis-1,3-Dichloropropene	N.D.	0.2	1
trans-1,3-Dichloropropene	N.D.	0.2	1
Ethylbenzene	N.D.	0.4	1
Freon 113	N.D.	0.2	10
2-Hexanone	N.D.	0.3	10
Isopropylbenzene	N.D.	0.2	5
Methyl Acetate	N.D.	0.2	5
Methyl Tertiary Butyl Ether	N.D.	0.2	1

*- Outside of specification
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Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
4-Methyl-2-pentanone	N.D.	0.5	10
Methylcyclohexane	N.D.	0.2	5
Methylene Chloride	N.D.	0.3	1
Styrene	N.D.	0.2	5
1,1,2,2-Tetrachloroethane	N.D.	0.2	1
Tetrachloroethene	N.D.	0.2	1
Toluene	N.D.	0.2	1
1,2,4-Trichlorobenzene	N.D.	0.3	5
1,1,1-Trichloroethane	N.D.	0.3	1
1,1,2-Trichloroethane	N.D.	0.2	1
Trichloroethene	N.D.	0.2	1
Trichlorofluoromethane	N.D.	0.2	1
Vinyl Chloride	N.D.	0.2	1
Xylene (Total)	N.D.	1	5
Batch number: 19106WAF026	Sample number(s): 1032096		
Acenaphthene	N.D.	0.1	0.5
Acenaphthylene	N.D.	0.1	0.5
Anthracene	N.D.	0.1	0.5
Benzo(a)anthracene	N.D.	0.1	0.5
Benzo(a)pyrene	N.D.	0.1	0.5
Benzo(b)fluoranthene	N.D.	0.1	0.5
Benzo(g,h,i)perylene	N.D.	0.2	0.5
Benzo(k)fluoranthene	N.D.	0.1	0.5
Chrysene	N.D.	0.1	0.5
Dibenz(a,h)anthracene	N.D.	0.1	0.5
Fluoranthene	N.D.	0.1	0.5
Fluorene	N.D.	0.1	0.5
Indeno(1,2,3-cd)pyrene	N.D.	0.1	0.5
Naphthalene	N.D.	0.1	0.5
Phenanthrene	N.D.	0.1	0.5
Pyrene	N.D.	0.1	0.5
	mg/l	mg/l	mg/l
Batch number: 19107B20A	Sample number(s): 1032091-1032099		
TPH-GRO AK water C6-C10	N.D.	0.014	0.10
Batch number: 191070026A	Sample number(s): 1032091-1032098		
DRO C10-C25	0.051 J	0.050	0.25

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: W191091AA	Sample number(s): 1032091-1032092								
Acetone	150	151.8			101		54-157		
Benzene	20	20.62			103		80-120		
Bromodichloromethane	20	21.43			107		71-120		
Bromoform	20	20.75			104		51-120		
Bromomethane	20	14.83			74		53-128		
2-Butanone	150	135.06			90		59-135		
Carbon Disulfide	20	19.49			97		65-128		
Carbon Tetrachloride	20	22.39			112		64-134		
Chlorobenzene	20	23			115		80-120		
Chloroethane	20	14.74			74		55-123		
Chloroform	20	21.65			108		80-120		
Chloromethane	20	15.62			78		56-121		
Cyclohexane	20	21.49			107		68-126		
1,2-Dibromo-3-chloropropane	20	22.01			110		47-131		
Dibromochloromethane	20	22.83			114		71-120		
1,2-Dibromoethane	20	22.5			112		77-120		
1,2-Dichlorobenzene	20	23.14			116		80-120		
1,3-Dichlorobenzene	20	22.53			113		80-120		
1,4-Dichlorobenzene	20	22.76			114		80-120		
Dichlorodifluoromethane	20	19.49			97		41-127		
1,1-Dichloroethane	20	21.07			105		80-120		
1,2-Dichloroethane	20	22.43			112		73-124		
1,1-Dichloroethene	20	22.48			112		80-131		
cis-1,2-Dichloroethene	20	23.97			120		80-120		
trans-1,2-Dichloroethene	20	19.56			98		80-120		
1,2-Dichloropropane	20	21.08			105		80-120		
cis-1,3-Dichloropropene	20	20.67			103		75-120		
trans-1,3-Dichloropropene	20	21.15			106		67-120		
Ethylbenzene	20	22.37			112		80-120		
Freon 113	20	23.99			120		73-139		
2-Hexanone	100	96.12			96		56-135		
Isopropylbenzene	20	22.79			114		80-120		
Methyl Acetate	20	18.86			94		54-136		
Methyl Tertiary Butyl Ether	20	23.89			119		69-122		
4-Methyl-2-pentanone	100	90.61			91		62-133		
Methylcyclohexane	20	21.67			108		67-121		
Methylene Chloride	20	21.15			106		80-120		
Styrene	20	22.56			113		80-120		
1,1,2,2-Tetrachloroethane	20	22.62			113		72-120		
Tetrachloroethene	20	23.67			118		80-120		
Toluene	20	22.75			114		80-120		
1,2,4-Trichlorobenzene	20	20.12			101		63-120		
1,1,1-Trichloroethane	20	21.89			109		67-126		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,2-Trichloroethane	20	23.69			118		80-120		
Trichloroethene	20	21.46			107		80-120		
Trichlorofluoromethane	20	18.66			93		55-135		
Vinyl Chloride	20	16.99			85		56-120		
Xylene (Total)	60	68.22			114		80-120		
Batch number: W191101AA	Sample number(s): 1032093-1032099								
Acetone	150	143.37			96		54-157		
Benzene	20	19.89			99		80-120		
Bromodichloromethane	20	20.59			103		71-120		
Bromoform	20	19.63			98		51-120		
Bromomethane	20	14.89			74		53-128		
2-Butanone	150	128.79			86		59-135		
Carbon Disulfide	20	18.01			90		65-128		
Carbon Tetrachloride	20	21.68			108		64-134		
Chlorobenzene	20	22.12			111		80-120		
Chloroethane	20	14.59			73		55-123		
Chloroform	20	21.17			106		80-120		
Chloromethane	20	16.03			80		56-121		
Cyclohexane	20	19.53			98		68-126		
1,2-Dibromo-3-chloropropane	20	19.71			99		47-131		
Dibromochloromethane	20	21.93			110		71-120		
1,2-Dibromoethane	20	21.56			108		77-120		
1,2-Dichlorobenzene	20	21.63			108		80-120		
1,3-Dichlorobenzene	20	21.28			106		80-120		
1,4-Dichlorobenzene	20	21.6			108		80-120		
Dichlorodifluoromethane	20	19.1			95		41-127		
1,1-Dichloroethane	20	20.19			101		80-120		
1,2-Dichloroethane	20	22.51			113		73-124		
1,1-Dichloroethene	20	21.04			105		80-131		
cis-1,2-Dichloroethene	20	22.97			115		80-120		
trans-1,2-Dichloroethene	20	19.24			96		80-120		
1,2-Dichloropropane	20	20.57			103		80-120		
cis-1,3-Dichloropropene	20	19.79			99		75-120		
trans-1,3-Dichloropropene	20	20.03			100		67-120		
Ethylbenzene	20	21.65			108		80-120		
Freon 113	20	22.16			111		73-139		
2-Hexanone	100	90.48			90		56-135		
Isopropylbenzene	20	22			110		80-120		
Methyl Acetate	20	18.25			91		54-136		
Methyl Tertiary Butyl Ether	20	25.05			125*		69-122		
4-Methyl-2-pentanone	100	86.73			87		62-133		
Methylcyclohexane	20	19.68			98		67-121		
Methylene Chloride	20	20.46			102		80-120		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Styrene	20	21.39			107		80-120		
1,1,2,2-Tetrachloroethane	20	21			105		72-120		
Tetrachloroethene	20	21.97			110		80-120		
Toluene	20	22.15			111		80-120		
1,2,4-Trichlorobenzene	20	18.64			93		63-120		
1,1,1-Trichloroethane	20	22.03			110		67-126		
1,1,2-Trichloroethane	20	23.18			116		80-120		
Trichloroethene	20	20.79			104		80-120		
Trichlorofluoromethane	20	17.97			90		55-135		
Vinyl Chloride	20	16.88			84		56-120		
Xylene (Total)	60	66.15			110		80-120		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 19106WAF026	Sample number(s): 1032096								
Acenaphthene	50	43.18	50	31.79	86	64	64-118	30	30
Acenaphthylene	50	43.67	50	31.8	87	64*	65-115	31*	30
Anthracene	50	45.69	50	33.1	91	66*	77-103	32*	30
Benzo(a)anthracene	50	46.27	50	33.2	93	66*	76-105	33*	30
Benzo(a)pyrene	50	46.66	50	33.09	93	66*	80-105	34*	30
Benzo(b)fluoranthene	50	48.53	50	33.04	97	66*	72-111	38*	30
Benzo(g,h,i)perylene	50	45.76	50	33.35	92	67*	70-111	31*	30
Benzo(k)fluoranthene	50	42.03	50	32.82	84	66*	77-112	25	30
Chrysene	50	44.84	50	33.89	90	68*	75-103	28	30
Dibenz(a,h)anthracene	50	47.86	50	35.04	96	70*	71-119	31*	30
Fluoranthene	50	47.27	50	35.05	95	70*	78-107	30	30
Fluorene	50	45.7	50	33.07	91	66*	68-117	32*	30
Indeno(1,2,3-cd)pyrene	50	45.88	50	33.73	92	67*	70-111	31*	30
Naphthalene	50	39.17	50	29.3	78	59	47-106	29	30
Phenanthrene	50	45.25	50	33.36	91	67*	80-107	30	30
Pyrene	50	43.16	50	32.09	86	64*	74-108	29	30
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 19107B20A	Sample number(s): 1032091-1032099								
TPH-GRO AK water C6-C10	1.10	1.24			113		60-120		
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 191070026A	Sample number(s): 1032091-1032098								
DRO C10-C25	4.01	3.58			89		75-125		

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Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: W191101AA	Sample number(s): 1032093-1032099 UNSPK: 1032093									
Acetone	N.D.	150	139.13	150	134.82	93	90	54-157	3	30
Benzene	N.D.	20	21.92	20	21.84	110	109	80-120	0	30
Bromodichloromethane	N.D.	20	21.91	20	21.33	110	107	71-120	3	30
Bromoform	N.D.	20	19.87	20	19.76	99	99	51-120	1	30
Bromomethane	N.D.	20	16.58	20	16.01	83	80	53-128	3	30
2-Butanone	N.D.	150	128.47	150	132.02	86	88	59-135	3	30
Carbon Disulfide	N.D.	20	20.18	20	20.02	101	100	65-128	1	30
Carbon Tetrachloride	N.D.	20	25.38	20	24.43	127	122	64-134	4	30
Chlorobenzene	N.D.	20	24.31	20	24.25	122*	121*	80-120	0	30
Chloroethane	N.D.	20	16.31	20	16.09	82	80	55-123	1	30
Chloroform	N.D.	20	23.31	20	23.22	117	116	80-120	0	30
Chloromethane	N.D.	20	16.95	20	17.04	85	85	56-121	1	30
Cyclohexane	N.D.	20	24.64	20	24.36	123	122	68-126	1	30
1,2-Dibromo-3-chloropropane	N.D.	20	20.68	20	20.55	103	103	47-131	1	30
Dibromochloromethane	N.D.	20	23.09	20	22.98	115	115	71-120	1	30
1,2-Dibromoethane	N.D.	20	22.43	20	22.49	112	112	77-120	0	30
1,2-Dichlorobenzene	N.D.	20	23.07	20	23.05	115	115	80-120	0	30
1,3-Dichlorobenzene	N.D.	20	23.09	20	22.95	115	115	80-120	1	30
1,4-Dichlorobenzene	N.D.	20	23.4	20	23.29	117	116	80-120	0	30
Dichlorodifluoromethane	N.D.	20	25.36	20	24.57	127	123	41-127	3	30
1,1-Dichloroethane	N.D.	20	22.03	20	21.97	110	110	80-120	0	30
1,2-Dichloroethane	1.19	20	24.97	20	24.52	119	117	73-124	2	30
1,1-Dichloroethene	N.D.	20	24.39	20	23.92	122	120	80-131	2	30
cis-1,2-Dichloroethene	N.D.	20	24.96	20	24.73	125*	124*	80-120	1	30
trans-1,2-Dichloroethene	N.D.	20	21.74	20	21.95	109	110	80-120	1	30
1,2-Dichloropropane	N.D.	20	21.59	20	21.68	108	108	80-120	0	30
cis-1,3-Dichloropropene	N.D.	20	20.45	20	20.74	102	104	75-120	1	30
trans-1,3-Dichloropropene	N.D.	20	20.76	20	20.77	104	104	67-120	0	30
Ethylbenzene	N.D.	20	24.12	20	24	121*	120	80-120	1	30
Freon 113	N.D.	20	28.08	20	27.32	140*	137	73-139	3	30
2-Hexanone	N.D.	100	92.71	100	94.61	93	95	56-135	2	30
Isopropylbenzene	N.D.	20	24.33	20	24.48	122*	122*	80-120	1	30
Methyl Acetate	N.D.	20	18.1	20	18.18	90	91	54-136	0	30
Methyl Tertiary Butyl Ether	N.D.	20	26.61	20	26.25	133*	131*	69-122	1	30
4-Methyl-2-pentanone	N.D.	100	87.36	100	88.13	87	88	62-133	1	30
Methylcyclohexane	N.D.	20	24.78	20	25.05	124*	125*	67-121	1	30
Methylene Chloride	N.D.	20	21.44	20	21.12	107	106	80-120	2	30
Styrene	N.D.	20	23.45	20	23.38	117	117	80-120	0	30
1,1,2,2-Tetrachloroethane	N.D.	20	21.69	20	21.96	108	110	72-120	1	30
Tetrachloroethene	3.26	20	28.28	20	28.88	125*	128*	80-120	2	30
Toluene	N.D.	20	24.22	20	24.32	121*	122*	80-120	0	30
1,2,4-Trichlorobenzene	N.D.	20	19.2	20	19.6	96	98	63-120	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,1,1-Trichloroethane	N.D.	20	24.57	20	24.47	123	122	67-126	0	30
1,1,2-Trichloroethane	N.D.	20	24.42	20	23.83	122*	119	80-120	2	30
Trichloroethene	N.D.	20	23.19	20	22	116	110	80-120	5	30
Trichlorofluoromethane	N.D.	20	22.05	20	21.95	110	110	55-135	0	30
Vinyl Chloride	N.D.	20	19.31	20	19.03	97	95	56-120	1	30
Xylene (Total)	N.D.	60	71.76	60	71.92	120	120	80-120	0	30
	mg/l	**mg/l**	**mg/l**	**mg/l**	**mg/l**					
Batch number: 19107B20A	Sample number(s): 1032091-1032099 UNSPK: 1032093									
TPH-GRO AK water C6-C10	N.D.	1.10	1.33	1.10	1.31	121*	119	60-120	2	20
	mg/l	**mg/l**	**mg/l**	**mg/l**	**mg/l**					
Batch number: 191070026A	Sample number(s): 1032091-1032098 UNSPK: 1032093									
DRO C10-C25	0.176	4.23	3.63	4.28	3.57	82	79	75-125	2	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C/D
Batch number: W191091AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
1032091	96	101	102	91
1032092	97	100	101	90
Blank	94	97	101	92
LCS	95	105	104	94
Limits:	80-120	80-120	80-120	80-120

Analysis Name: VOCs- 5ml Water by 8260C/D
Batch number: W191101AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
1032093	96	101	101	91
1032094	97	102	104	96
1032095	97	100	105	96
1032096	96	100	102	92
1032097	98	104	102	90
1032098	97	102	101	90
1032099	98	104	102	90

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C/D
Batch number: W191101AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	97	104	102	92
LCS	97	101	104	98
MS	97	102	104	96
MSD	97	100	105	96
Limits:	80-120	80-120	80-120	80-120

Analysis Name: 16 PAHs 8270D
Batch number: 19106WAF026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
1032096	70	75	71
Blank	71	75	93
LCS	76	86	95
LCSD	56	64	70
Limits:	55-114	53-113	69-116

Analysis Name: TPH-GRO AK water C6-C10
Batch number: 19107B20A

	Trifluorotoluene-F
1032091	88
1032092	88
1032093	86
1032094	88
1032095	95
1032096	89
1032097	88
1032098	89
1032099	87
Blank	88
LCS	96
MS	88
MSD	95
Limits:	60-120

Analysis Name: AK 102-SV DRO
Batch number: 191070026A

	Orthoterphenyl
1032091	103
1032092	92
1032093	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 05/09/2019 11:02

Group Number: 2038590

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: AK 102-SV DRO
Batch number: 191070026A

	Orthoterphenyl
1032094	87
1032095	82
1032096	114
1032097	111
1032098	95
Blank	111
LCS	109
MS	87
MSD	82
Limits:	50-150

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Chevron Generic Analysis Request/Chain of Custody

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Acct. # 11964 For Eurofins Lancaster Laboratories Environmental use only Group # 2038590 Sample # 103209 1 - 099

Client Information

Facility # 97324 WBS 02.09 - Groundwater Sampling/Monitoring

Site Address 4417 Lake Otis Parkway, Anchorage, AK

Chevron PM Eric Hetrick Lead Consultant Arcadis

Consultant/Office

Consultant Project Mgr. Nicole Monroe

Sampler David G Beaudoin

State where samples were collected: Alaska For Compliance: Yes ☒ No ☐

SCR #:

Matrix

Soil ☐ Sediment ☐ Water ☒ Potable ☐ Ground ☒ NPDES ☐ Surface ☐ Oil ☐ Air ☐

Analyses Requested

Preservation and Filtration Codes

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☐ Naphth ☐	8260 full scan VOCs	Oxygenates ____	TPH-GRO AK101 ☐ 8015 ☐ 8260 ☐	TPH-DRO without Silica Gel Cleanup ☐ AK102	TPH-DRO with Silica Gel Cleanup ☐	VPH ☐ EPH ☐ Method ____	Lead Total ☐ Diss. ☐ Method ____	PAH us EPA 8270
EQB-1-W-190409	04.09.19	1125	/		8		/		/	/				
MW-1R-W-190409	04.09.19	1235	/		8		/		/	/				
MW-8RR-MS/MSD-W-190409	04.09.19	1325	/		8		/		/	/				
MW-8RR-W-190409	04.09.19	1325	/		8		/		/	/				
MW-2R-W-190409	04.09.19	1420	/		9		/		/	/				/
MW-9-W-190409	04.09.19	1600	/		8		/		/	/				
BD-1-W-190409	04.09.19	—	/		8		/		/	/				
Trip Blank	04.03.19				4		/							

Preservation Codes

H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
F = Field Filtered O = Other

☐ Results in Dry Weight

☐ J value reporting needed

☐ Must meet lowest detection limits possible for 8260 compounds

Remarks

Turnaround Time Requested (TAT) (please circle)

Standard 5 day 4 day
72 hour 48 hour 24 hour

Data Package (circle if required)

Type I - Full Type III Type VI (Raw Data)

EDD (circle if required)

CVX-RTBU-FI_05 (default) Other: ____

Relinquished by	Date	Time	Received by	Date	Time
	04.09.19	17:00	Arcadis Cold Storage		
	04.10.19	0735			
				4.11.19	1010

Relinquished by Commercial Carrier: UPS ____ FedEx ✓ Other ____

Temperature Upon Receipt 5.7 °C

Received by ____ Date ____ Time ____

Custody Seals Intact? Yes No

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Sample Administration Receipt Documentation Log

Doc Log ID: 246190

Group Number(s): 2038590

Client: Chevron

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	04/11/2019 10:10
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	AK		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Darian Jaynes (29952) at 23:06 on 04/11/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	5.7	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

APPENDIX D

ADEC Data Review Checklist

Laboratory Data Review Checklist

Completed By:

Suresh PR

Title:

Project Chemist

Date:

July 29, 2019

CS Report Name:

First Semiannual 2019 Groundwater Monitoring Report

Report Date:

May 09, 2019

Consultant Firm:

ARCADIS U.S., Inc

Laboratory Name:

Eurofins Lancaster Laboratory, Lancaster, Pennsylvania

Laboratory Report Number:

2038590 – LSV39

ADEC File Number:

2100.26.008

Hazard Identification Number:

23885

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

   ☑ Yes ☐ No Comments:

Yes.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

   ☐ Yes ☑ No Comments:

Samples were not transferred to another lab.

2. Chain of Custody (CoC)

   a. CoC information completed, signed, and dated (including released/received by)?

   ☑ Yes ☐ No Comments:

Yes.

   b. Correct Analyses requested?

   ☑ Yes ☐ No Comments:

Yes.

3. Laboratory Sample Receipt Documentation

   a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

   ☑ Yes ☐ No Comments:

Yes.

   b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   ☑ Yes ☐ No Comments:

Yes.

   c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

   ☑ Yes ☐ No Comments:

Yes.

   d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

   ☐ Yes ☑ No Comments:

No discrepancies.

e. Data quality or usability affected?

☐ Yes ☒ No Comments:

Data quality/usability was not affected.

4. Case Narrative

a. Present and understandable?

☒ Yes ☐ No Comments:

Yes.

b. Discrepancies, errors, or QC failures identified by the lab?

☒ Yes ☐ No Comments:

Yes.

c. Were all corrective actions documented?

☒ Yes ☐ No Comments:

Yes.

d. What is the effect on data quality/usability according to the case narrative?

☐ Yes ☒ No Comments:

Data quality/usability was not affected.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

☒ Yes ☐ No Comments:

Yes.

b. All applicable holding times met?

☒ Yes ☐ No Comments:

Yes.

c. All soils reported on a dry weight basis?

☐ Yes ☒ No Comments:

No soil samples were submitted for analysis.

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

☒ Yes ☐ No Comments:

Yes.

e. Data quality or usability affected?

☐ Yes ☒ No Comments:

Data quality/usability was not affected.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

☒ Yes ☐ No Comments:

Yes.

ii. All method blank results less than Method Detection Limit (MDL)?

☐ Yes ☒ No Comments:

The compound DRO C10-C25 was detected (0.051 J mg/l) below the reporting limit in a method blank batch 191070026A. A blank action level was established at five times of the detected blank concentration. The compound DRO C10-C25 result in samples MW-1R-W-190409, MW-8RR-W-190409, MW-9 -W-190409 and BD-1-WD-190409 were reported less than the action level and qualified as non-detect (UB) at the reporting limit.

iii. If above MDL, what samples are affected?

☒ Yes ☐ No Comments:

Compound DRO C10-C25 in samples MW-1R-W-190409, MW-8RR-W-190409, MW-9 -W-190409 and BD-1-WD-190409 qualified as non-detect (UB).

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☒ Yes ☐ No Comments:

Yes.

v. Data quality or usability affected?

☒ Yes ☐ No Comments:

The compound DRO C10-C25 results in few samples were qualified as non-detect. The reported data should still be considered as usable.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

☒ Yes ☐ No Comments:

Yes.

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

☐ Yes ☒ No Comments:

Metals/Inorganic analysis was not requested for submitted samples.

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

☐ Yes ☒ No Comments:

No. The LCSD recoveries for all target compounds with exception of acenaphthene and naphthalene were less than the quality control limits in sample MW-2R-W-190409 for method SW8270D. The associated detected (J) and non-detected (UJ) results were qualified as estimated.

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

☐ Yes ☒ No Comments:

The RPDs between LCS/LCSD were above the control limits for compounds acenaphthylene, fluorene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)perylene for method SW8270D in sample MW-2R-W-190409. The associated results were qualified as estimated.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

☒ Yes ☐ No Comments:

MW-2R-W-190409.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☒ Yes ☐ No Comments:

Yes.

vii. Data quality or usability affected?

☒ Yes ☐ No Comments:

The LCSD recoveries RPD between LCS/LCSD were exceeded the control limits. The associated results were qualified as estimated in sample MW-2R-W-190409.

c. Matrix spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – One MS/MSD reported per matrix, analysis and 20 samples?

☒ Yes ☐ No Comments:

Sample MW-8RR-W-190409 was used as the MS/MSD analysis.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

☐ Yes ☒ No Comments:

The MS and MSD recoveries for compound tetrachloroethene (125% MS / 128% MSD) was greater than the laboratory control limits in sample MW-8RR-W-190409. The tetrachloroethene result in this sample qualified as estimated.

iii. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

☒ Yes ☐ No Comments:

Yes.

iv. If %R or RPD is outside of acceptable limits, what samples are affected?

☐ Yes ☒ No Comments:

Tetrachloroethene result in the sample MW-8RR-W-190409 was qualified as estimated.

v. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☒ Yes ☐ No Comments:

Yes.

vi. Data quality or usability affected? (use comment box to explain)

☒ Yes ☐ No Comments:

The MS/MSD recoveries were greater than the control limits in sample MW-8RR-W-190409. The result is qualified as estimated.

d. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

☒ Yes ☐ No Comments:

Yes

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

☒ Yes ☐ No Comments:

All surrogate recoveries were within the control limits.

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

☐ Yes ☒ No Comments:

No.

iv. Data quality or usability affected? (use comment box to explain)

☐ Yes ☒ No Comments:

Data quality/usability was not affected.

e. Trip blank – Volatile analyses only (GRO, BTEX, etc): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples?
(If not, enter explanation below.)

☒ Yes ☐ No Comments:

Yes.

ii. All results less than MDL?

☒ Yes ☐ No Comments:

Yes.

iii. If above MDL, what samples are affected?

☐ Yes ☒ No Comments:

None of the data affected.

iv. Data quality or usability affected?

☐ Yes ☒ No Comments:

Data quality/usability was not affected.

f. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

☒ Yes ☐ No Comments:

Yes.

ii. Submitted blind to lab?

☑ Yes ☐ No Comments:

BD-1-WD-190409 was collected from MW-1R-W-190409.

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

☑ Yes ☐ No Comments:

Yes.

iv. Data quality or usability affected?

☐ Yes ☑ No Comments:

g. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below).

☑ Yes ☐ No

Equipment blank sample was collected as QA-O-190409.

i. If above MDL, what samples are affected?

☑ Yes ☐ No Comments:

The compound acetone was detected (3 J ug/l) below the reporting limit in an equipment blank sample QA-O-190409 for method SW8260. A blank action level was established at ten times of the detected blank concentration. The compound toluene result in sample MW-2R-W-190409 was reported less than the action level and qualified as non-detect (UB) at the reporting limit.

The compounds 2-butanone (1 J ug/l) and chloroform (0.3 J ug/l) were detected below the reporting limit in an equipment blank sample QA-O-190409 for method SW8260. The associated results were non-detect; hence qualification was not required.

The compound DRO C10-C25 was detected (0.067 J mg/l) below the reporting limit in an equipment blank sample QA-O-190409 for method AK-102. A blank action level was established at five times of the detected blank concentration. The compound DRO C10-C25 result in samples MW-1R-W-190409, MW-8RR-W-190409, MW-2R-W-190409, MW-9 -W-190409 and BD-1-WD-190409 were reported less than the action level and qualified as non-detect (UB) at the reporting limit.

ii. Data quality or usability affected?

The compounds toluene and DRO C10-C25 results in few samples were qualified as non-detect. The reported data should still be considered as usable.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

☒ Yes ☐ No Comments:

Yes.